MOTOR AGE

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INAUGURATING THE MOTOR BUS

EUROPEAN countries have, after several years of waiting, seen automobile transportation services finally established among the other methods of transporting passengers and merchandise. There have been many such service lines in operation in France, England, Germany and some of the colonies of the European powers, and it is safe to say that people who desired to promote or invest in such transportation lines have awaited the results of the operation of the few lines. In some cases results netted no profit, in other cases there was such a small profit that it was thought hardly worth attempting such enerprises.

A LONDON MOTOR BUS

There were, however, a few instances, especially in France and England, where it was shown that after the first 6 or 12 months the transportation companies began to make a fair profit and that the country people, after having been educated in the matter of automobile transportation and shown conclusively that they would profit greatly by such enterprises, helped the lines and made it possible for the latter to improve the service for the benefit of all concerned.

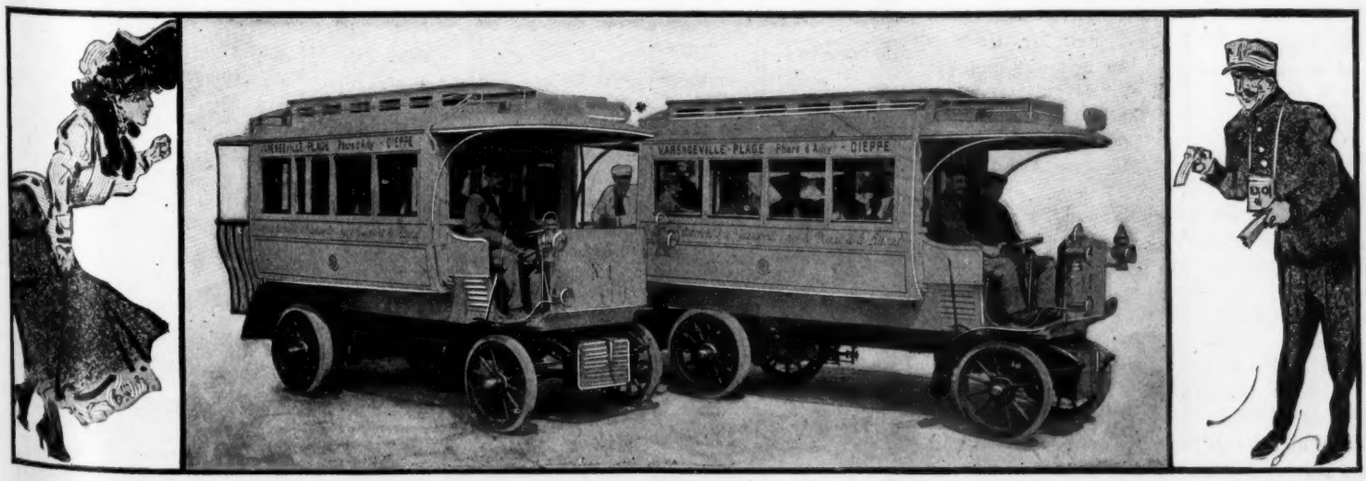
Some of the unsuccessful companies in investigating the cause for failure discovered that one of the principal reasons is that an automobile transportation company must not only be run in a section of a country where there are good roads, but in thickly populated districts and through large numbers of localities. A service of this kind was organized last year to run between two sea resorts on the French coast, and although there are many people in each locality during the summer months, and although they are not far apart, the undertaking proved a loss. On the other hand a transportaion service organized in a state of France, which passes through a dozen localities within a radius of 25 or 30 miles, showed an unexpectedly large profit, notwithstanding the fact that a railroad passes through some of the towns.

Another matter to be considered is the kind of vehicles to be used. Some companies use small cars, others use motor buses, which do not travel fast enough, others are not comfortable. That the lines which have been most successful are those using motor buses, which can carry at least twelve passengers each, besides having ample accommodations for a fair-sized load of merchandise. These cars can be run in most instances at an average of 12½ miles an hour, but the tendency is toward increasing this rate of speed.

The automobile passenger and goods transportation company which was formed in the Indre and Loire state will be operated on a more extensive scale than any similar transportation company in operation in France. While the various routes of the circuit in which the company will operate have only 141 miles, they pass through nearly fifty localities. Twelve large de Dion-Bouton omnibuses have thus far been purchased for the service, nine being in daily use, while the other three are kept in reserve. Each of these vehicles seats sixteen persons, and can carry 1,100 pounds of merchandise. With a full load the cars can be driven at an average speed of 12½ miles.

The officials think it impossible to make an estimate as to the probable receipts, or even the number of persons using the line during the year. They are, however, hopeful, because the line goes through thickly populated sections of the state, which is itself one of the richest in France, besides having splendid roads.

In Switzerland there are not yet many automobile transportation services, one reason being the fact that most people are afraid they will not give satisfaction on the mountain roads. Recently a concern was formed which operates two 24-horsepower Martini cars between Yverdon and Moudon. The feature in connection with this company is that it insures any passenger against accidents.



MOTOR BUSSES IN REGULAR PASSENGER SERVICE IN FRANCE

OFF FOR THE ANTIPODES

THE GLIDDEN TOURING TROPHY

Vancouver, B. C., Dec. 15—With his Napier car that has already covered 20,065 miles reposing snugly beneath a tarpaulin on the main hatchway of the Moana, Charles J. Glidden, of Boston, the world-girdling motorist, sailed Friday for the Antipodes to resume the second half of his trip around the world in an automobile. Accompanying him were Mrs. Glidden and his chauffeur, Charles Thomas.

Mr. Glidden and party arrived in Vancouver from Boston 3 days previous, to prepare for their trip to the south. Nearly a fortnight before that date, however, Charles Thomas, the chauffeur, had arrived from the east to give Mr. Glidden's car a thorough overhauling. The car has been stored in bond here since Mr. Glidden's remarkable record-breaking westward trip over the tracks of the Canadian Pacific. As the car had run nearly 4,000 miles this year and as it is liable to run another whole season before he will get another chance to overhaul it, Mr. Thomas went carefully over every part of the mechanism before it was shipped.

He also removed the steel flanged wheels by which the car was enabled to travel on the tracks and substituted the usual road wheels. The Napier car was used around the city for a few days before the departure of the steamer and looked more like a car that had just been received direct from the factory than one that had made half the circuit of the globe over all kinds and conditions of roads.

These steel-flanged wheels, by the way, will not likely be used again in Mr. Glidden's world-girdling tour. So, in response to urgent requests from friends in Boston, he shipped them east. The wheels are intended as one of the exhibits at the coming automobile show and will form an interesting exhibit of one of the most unique motor car trips on record. The wheels weigh 1,500 pounds and are to be exhibited at the Chicago, New York and other eastern shows.

A big crowd of people saw Mr. Glidden and his party off and the motorist and his car were the principal objects of interest on board despite the fact that many curios from the St. Louis fair and some of the natives from the Antipodes were among the passengers on the Moana.

Mr. Glidden's first stop will be at Honolulu, where he has arranged to have his car swung ashore for the 6-hours' stay of the steamer at that port. He plans to make at least a hundred-mile tour during that time in the vicinity of Honolulu. The next stopping place will be the Fiji islands, where in the 10-day stay Mr. Glidden expects to cover at least 1,000 miles, visiting the principal points of interest in the islands. This will be the first motor car to tour that part of the world and the effect of its appearance on some of the natives may be better imagined than described.

As there is no gasoline obtainable on the islands in sufficient quantity, Mr. Glidden takes with him 100 gallons. Then from the Fiji Islands the next steamer will be taken to New Zealand, where another motoring feat will be attempted. This will be the attaining of the most southerly point on the globe on which there exists a highway. As Mr. Glidden has already the honor of being the first to cross the Arctic circle, his attempt in the land of the Southern Cross to win fresh honors will be watched with interest by motorists all over the world. In all, 1,000 miles in New Zealand will be covered.

Then to Tasmania for a short run of 100 miles, after which the car will be shipped to Australia, where commencing with Adelaide, Mr. Glidden and his party have planned another 1,000-mile tour. Owing to there being three different gauges of railway tracks of Australia, and the highways being fairly good, Mr. Glidden decided yesterday that he would not take the steel flanged wheels to Australia with him, and the remainder of his travels for this season at least will be done on the usual pneumatic tires.

From Australia he will go to the Philippines for a mere matter of 500 miles or so and then to Bombay. This will take up the southern summer months and Mr. Glidden and his party will leave the car at Bombay and return to their home in Boston by way of Europe. The following season he will resume his tour of the world by going to Japan and China, where about 3,000 miles will be covered. At the conclusion of that season the car will be probably stored at some point in the Orient and Mr. Glidden and his party will return home by way of Vancouver. The year following that will likely see the conclusion of the world-girdling motor tour, as Mr. Glidden and his party will finish by returning to Boston through Asia and Europe, covering those portions of the latter which he has not already been over.

THREE AMERICAN ENTRIES

New York, N. Y., Dec. 19—Entries for the Bennett cup race have closed with the Automobile Club of America, with three nominations. They include two Pope-Toledo cars and one Locomobile racer, each of them to be a new model. On Saturday the club nominated a team for the international event, to be held in France next June, and it was followed by a letter containing a formal nomination with the proper fees.

The machines entered are a 50-horsepower Pope-Toledo, entered by Colonel Albert A. Pope for the Pope Motor Car Co., of Toledo; a car of duplicate power made by the same company and entered by W. T. Muir, a sportsman of Lexington, Ky., who is making his initial bow in the automobile racing game; and an 80-horsepower Locomobile, entered by Dr. Harold E. Thomas, of Chicago, and now being especially built by the Locomobile Co. of America.

Before these machines are sent abroad to represent America they must prove their speed and endurance to the race committee of the Automobile Club of America, which consists of George I. Scott, W. K. Vanderbilt, Jr., and S. B. Stevens. The machines are to be placed at the disposal of this committee on May 1 for any tests that they may require. As all three cars are expected to compete in the Florida tournament in January, it may not be necessary to have any subsequent tests.

On the day the entries closed Andrew Dam called at the automobile club for particulars, stating that he expected to enter a 120-horsepower Treene car, made by the Corliss Engine Co. Unfortunately the entry was not made, nor was any word received at the club from the various concerns which have built racing cars, and which it had been stated expected to be represented.

Motorists generally are giving unstinted praise to the two American manufacturers who have built racers for the important event to be held on the other side. The reputation of both companies is considered a guarantee that creditable performances will be supplied by their product.

HOLDS ENDURANCE TEST RECORD

London, England, Dec. 8—The 4,000-mile endurance trial of the Martini car, which was driven most of the distance by Captain Deasy, ended yesterday at the garage of the Automobile Club of Great Britain and Ireland, whence the captain started November 14. This has been the longest official trial of a motor-car on record, and the official observer's report contains interesting information.

The longest distance run without involuntary stops was 1,620½ miles, and the next longest run, 1,223 miles. Eight involuntary stops were made for the following reasons: Removal of differential pinions, which occasioned a net loss of 11 hours 25 minutes; to thaw lubricator, twice, loss of 16 minutes the first time and 10 minutes the second time; broken chain bolt on the near side, 9 minutes; broken chain bolt on the off side, 8 minutes; carbureter choked, 8 minutes; to examine noise inside bonnet, nothing found wrong, 2 minutes; trouble in gear meshing, 1 minute.

The tire troubles during the 4,000-mile test were remarkably few, only six instances having occurred. The first time the near hind wheel chafed, due to side slip, while on the next day a new hind wheel tire had to be fitted and pumped up in the evening. Nine days later a tire had to be pumped up in midday. On the following day troubles came in quick succession. Several new tubes were put in the off hind tire and a new cover and tube were fitted. The next day the old cover was again put on, but it burst and a new cover and tube were again fitted. Another new cover was put on a wheel on the succeeding day, but from this on no more tire troubles occurred.

Eight times during the trial adjustments were made during voluntary stops. In the first instance a nut on the radiator had to be tight-

ened; then the clutch collar had to be adjusted and the chains tightened. A new bolt was put into the clutch collar. The day after the plugs had to be adjusted twice. A day passed without adjustments, but during the succeeding 24 hours a new bolt had to be put in the foot brake. Five days passed without trouble, and then they again began. The foot brake and the chains required adjustment; the next day the exhaust pipe connection to the exhaust box had to be remade, while plugs had to be adjusted on the succeeding day.

Captain Deasy expressed himself as thoroughly satisfied. The roads chosen were by no means the best in England, and while in Hertfordshire many miles were made over roads where stone had been freshly laid and left several days without having been rolled. The accident which necessitated the removal of the differential pinions came about through skidding while turning and trying to run through a gate. The car fouled the curb and the metal felloe and the axle were bent, while the tire bulged somewhat out of the rim. The cover was cut through when the wheel turned and touched the chain bolt. Before stopping to make this repair 195 miles were covered.

AMATEUR RACING ON COAST

Los Angeles, Cal., Dec. 17—At today's meet at the Agricultural park track the only notable event was the breaking of the local mile record by Barney Oldfield and his Peerless racing car. The former record was established here by Oldfield 2 years ago, and was 54⅕ seconds. Today after going 2 miles, each in 54⅕ seconds, he succeeded in covering the third mile in 54 seconds, thus breaking his record.

There was a big crowd which seemed disappointed because nothing startling occurred during the afternoon. In the 5-mile race between Oldfield and Frank Garbutt, who drove his Stewart-Garbutt racing machine, the former won by scarcely the length of his machine, but it seemed to many that he did not try to make a fast finish, yet the event pleased the grand stand generally.

There was a special event in which the winners of the heats were to meet in a final, the winner to be "world's champion." Oldfield won the first heat from Charles Burman, who drove a stripped Peerless stock car, covering the 3 miles in 3:01⅕. In the second heat Barney met Garbutt, who led until the second mile had been completed. Then the Peerless driver shot to the front and crossed the tape an easy winner. The heat was called off, however, Garbutt complaining that he had thought the distance of the heat was to be 5 miles.

Frank Kulick was here but his racing machine had not yet arrived and thus one heat had to be held over.

The 5-mile handicap was interesting and was won by Burman, who was on scratch. A White having an allowance of 1:30 and a Ford with 1:00 were the other competitors. Burman's time was 5:49. In a preceding race with Campbell's stripped Ford stock car, the driver of the Peerless stock machine was defeated.

Frank Garbutt tried to break the world's record for amateur drivers, which is 56⅖ seconds. He went 3 miles and his fastest mile was run in 58 seconds. Garbutt is a good amateur sportsman and is locally popular on account of his persistence.

OLDFIELD'S RECORD JOB

He Delights Californians by Clipping the World's Figures From 13 to 50 Miles Inclusive

Fresno, Cal., Dec. 15—As the readers of MOTOR AGE were briefly informed by wire, Barney Oldfield, with his Peerless Green Dragon, yesterday smashed all records from 13 miles to the half century mark, incidentally capturing thirty-eight individual records.

Since yesterday afternoon the name of this California town has become prominent in the automobile world; today probably many enthusiasts of the racing sport are looking up maps to find out where Fresno is, or if possible, some telegraphic error might have been made and that the news should have come from Frisco or from Los Angeles. And all this on account of one man and one automobile—Barney Oldfield and the Peerless Green Dragon.

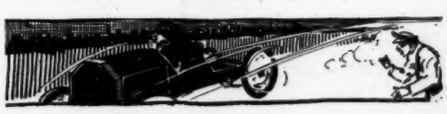
Other events were on the program for the afternoon, but who among the several thousand spectators really cared for them? It was Oldfield they wanted to see, and not until he made his appearance on the mile track was the crowd enthusiastic. He covered a few laps to give evidence that the green thing, of which the majority of the spectators had probably no conception, could go a mile a minute.

It was announced that unless Oldfield found the track in good condition he would not go for records. Oldfield started and, after covering a mile in order to get under full speed, the signal was given to begin timing. The record-breaking trial had started. The crowd had hardly had the time to look at the man in the strange-looking car when he passed the grand stand like a flash. The first mile had been covered in 56⅖ seconds, and the driver was increasing the speed; as a matter of fact the second mile was covered in 55⅖ seconds, a second faster than the first. This gait was kept up, the sixth mile being covered one-fifth of a second faster.

Miles continued to be reeled off and it was evident at the tenth mile that if Barney could keep up this rate of speed, barring accidents, records would soon begin to be knocked out of existence. It took him a few more circles around the track to begin the work, and when the thirteenth mile was completed no more doubt existed.

It was only after the fifteenth mile that the first announcement was made. The big crowd was eagerly waiting for this, and when it heard that the world's record had been broken by 2⅖ seconds, it started a noisy demonstration.

After the first 25 miles had been completed, the time being 23:39⅗, or 19⅖ seconds better than the former record, made by Earl Kiser in a Winton last October in Cleveland, Oldfield slowed down and instead of averaging 56 to 57 seconds per mile, ran almost continually within a fraction of a second at 59 or 60 seconds per lap. Nevertheless the champion went faster than any other man ever drove a car on a track such a distance, and broke Charles Gorndt's record of 55:42, made in Cleveland last October with a Winton, by 7 minutes 2⅖ seconds, besides all intermediate records from the thirteenth mile.



After the record-holder was through with his little job, he said that he considered the Fresno track one of the fastest in the United States, and he thought he might possibly be able to lower the mile record on that track under as favorable conditions as yesterday. Barney added that he believed the light rain which fell during the morning had a good deal to do with his success, because it cooled the track so that the tires of his car did not get warm.

Charles Burman gave a 4-mile exhibition with a 24-horsepower stripped Peerless car. His fastest mile was run in 1:02⅕. Later in the afternoon he tried to do better than this, but was unsuccessful. There was also a motor cycle event, in which a boy with an allowance of half a mile in a 5-mile race, won by nearly a quarter of a mile.

TOURIST TROPHY RULES OUT

London, England, Dec. 10—The Automobile Club of Great Britain and Ireland has issued the regulations governing the contest for the tourist trophy, which is open exclusively to touring cars. The competition is to take place every year between May and October, and will be open to cars made in any country, but carrying a limited quantity of fuel. The distance of the race will be from 150 to 250 miles, including controls. Cars may be entered by members of any recognized club. The club will provide the gasoline, the quality of which will depend upon the condition of the roads on the day of the race, and upon the nature of the course selected, but the average will be 1 gallon for 25 miles of dry average road. The car making the fastest time will be judged the winner. More than two cars of one manufacturer will not be accepted, and the weight of the chassis must not be less than 1,300 pounds, and not over 1,600 pounds. Accumulators, other ignition apparatus, tires, bonnet, empty tank, dashboard, steps, mudguards and lamp brackets are considered part of the chassis. The chassis must carry a load of not less than 950 pounds, not including the fuel, oil, water, spare tires, parts, baggage and provisions. In the weight of 950 pounds, the driver and one passenger are included, also the body with rear mudguards, their stays, floor boards and lamps, besides not less than 300 pounds of loose ballast.

All cars must have four wheels, the distance between the centers of the wheels on each axle must be not less than 4 feet, and the wheel base not less than 7 feet 6 inches. The body of the car must be of the ordinary touring type, and seat three passengers besides the driver. Seats must be at least 34 inches from the ground, and there must be a clear seating space of not less than 40 inches between cushions, the seats being so disposed that two persons sit in front and two in the rear. The body must be easily removable. Only the driver of the car and the passenger with him will be allowed to fix anything on the car or assist in any way during the race.

The rules have been considerably discussed by those most directly interested in the success of the contest and general satisfaction exists over the provisions, it being thought they will result in one of the most useful contests ever run in Great Britain.

MOTOR AGE

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THE MOTOR RACING SITUATION

With the nominations for the American team in the Bennett cup race made and the Ormond tournament but a month away, both of which are by all odds the most important features of the sport just at present, the racing end of automobiling is brought to the immediate and serious consideration of the sport and trade.

Racing has been a prominent factor in the development of the European automobile. The racing events of the past year starting at Ormond with the defeat of W. K. Vanderbilt, Jr., and his Mercedes by Barney Oldfield with the Winton; followed by the excellent all-around showing of the Pope-Toledo, the Packard and other American cars in the Vanderbilt cup race; and winding up with the defeat of the Bennett cup driver and car and two other high powered speed importations by the American champion and his Peerless Green Dragon, have had results that have meant much to the home industry and have demonstrated to our makers possibilities of successful and valuable comparison with the foreign product.

That there were not more than three candidates for the honor of representing this country in next year's team contest in France is accounted for by the patriotism and liberality of that good American sportsman, W. K. Vanderbilt, Jr., in giving our makers and drivers a chance to compare their speed products and skill as racing pilots on home soil with Europe's best, now, in view of the prominence and success of the Long Island contest, assured of being pitted against them.

American representation in the race across the water has been provided for by the entry of three cars. Colonel Albert A. Pope led off with the nomination of a 50-horsepower Pope-Toledo especially designed and built Bennett cup racer. Other New Yorkers hanging fire in naming candidates to complete the team, two members of the Chicago Automobile Club with commendable patriotism came to the rescue of the Automobile Club of America. Dr. Harold E. Thomas, a brother of E. R. Thomas, the New York turf magnate and automobile track racing enthusiast, commissioned A. L. Riker, of the Locomobile Co. of America, to design and build for him an 80-horsepower racer. W. T. Muir, of Lexington, Ky., quickly followed his clubmate's lead by commissioning Orlando F. Weber to have built for him at Toledo a four-cylinder 30-horsepower Pope-Toledo.

In this trio the United States has excellent promise of creditable representation. The fine showing of the Pope-Toledo in the Vanderbilt cup race, in which H. H. Lytle piloted a four-cylinder 24-horsepower stock touring car into third place ahead of four out-and-out foreign combinations of car and driver and seven European machines steered by American drivers, demonstrated the ability of the designer and builder of the cars of this make to turn out racing craft of proven competence to go against Europe's proudest. The record of the Vanderbilt cup predecessor is a guarantee that his automobiles will go fast and far in the best European touring car company with a chance of winning as creditable a place at the finish as did Lytle's mount in the Long Island contest.

The Thomas Locomobile will, of course, be an untried long-distance racing proposition. Still, it has for a designer a veteran, who has succeeded in producing a one-time world straightaway mile record performer in its motive class, and for its builder a concern that has turned out one of the best built and most reliable makes of American cars. It has long been Mr. Riker's ambition to have a chance at race car designing. His acknowledged skill as designer and conservatism as a builder inspires confidence that he will once more make good in a new field.

In a word America will present no freaks or experiments and if a victor will win on legitimate lines that will symbolize national types and not Yankee eccentricities.

Wisely profiting by the humiliating lessons of inexcusable unpreparedness and eleventh hour make-shifting, the racing committee of the A. C. A. has established prudently strenuous conditions precedent to eligibility of candidate cars to whatever preliminary tests the committee may demand before sending them across the water as a representative team. In brief it is required that the candidate make affidavit that the car entered has been run at least 1,000 miles on the road; at least 250 miles without stopping the engine, and at least 40 miles on road or track within the hour.

With all due respect to the estimable gentlemen of high social standing who have made up the two previous A. C. A. racing committees, their conduct of former preliminary international team tests has not been satisfactory. The so-called "elimination" tests, when there were no cars to be "eliminated," have been so puerile and insufficient as to have gone further than the mere creation of dissatisfaction and degenerated into farces that have made the club and American road racing automobiledom the laughing stock of our foreign rivals, to the very great injury of our sport and industry. And all this is said with due appreciation of the difficulties under which our highway laws placed the committee, and acknowledgement of the tardiness, negligence and unreasonable demands of some of the candidates themselves.

By all means cut out this elimination trial farce this time. The conditions precedent to the test will prove that the cars have run far and creditably fast, and are capable of running as far without stopping as the distance of the race course and fuel exigencies will permit. There are but three entries—a complete team. The club can safely stand or fall on such proven running abilities as the preliminary requirements will demonstrate, and the past performances of two of the makes of cars, and the reputation of the designer of the third will assure. In the name of common sense and national self respect let the eliminating farce be cut out this year.

That there will be straightaway racing galore at Ormond at every distance and for every weight, price and class of car, the final program just issued gives too ample assurance. The only danger that confronts the success of the Florida beach tournament is the too-much-of-a-good-thing peril. If it should go in the air through failure of completion of its program it can be charged largely to the misdirected over-generosity of its friends.

The tide permits the use of the beach for but 4 hours each day, yet the program calls for twenty-seven racing and time trial events, with the innumerable trial heats the assured large entry list will necessitate. There are announced six events at 1 mile, nine at 5 miles, seven at 10 miles, one at 20 miles, two at 50 miles, one at 100 miles and one at 1 kilometer. When one stops to consider the time that will be wasted in changing the timing stations and the inevitable delays bound to occur through slips in wire connections and timing apparatus, and the unexpected accidents that always happen, the magnitude of the task in getting through such a monster program will be realized. It will take the most prompt of experienced management to accomplish it.

Among the events for which special cups have been donated are several to be run under abnormal conditions; several confined to special makes of cars, and several that are mere repetitions of standard events on the program. It is, of course, too late to change the latter, and mighty good luck and very good management may pull through all the scheduled events before the week closes, and the racing and track contingents must perforce hurry away respectively to the Palm Beach and possibly a Cuban meet and the Chicago show.

It would have been the better plan, which by all means should be followed next year, to have arranged the program on the theory that the function of the meet was to provide for the determination of the world's straightaway championships for all classes at a reasonable variety of distances. Assignment of standard races should have been made to those desiring to donate cups, which events should have borne the names of the trophy donors—the Vanderbilt Hundred, the Dewar Mile, the Bowden Kilometer, the Clowry Steam and so on through the list. This can be and doubtless will be done all the way down the list next year. This season's experience will determine the program extent and variety possibilities.

Senator Morgan has done well. He seems, though, to have been swamped by the practical evidences of the racing world's appreciation of the greatness of his conception and its realization.

Jump Sparks

The American Automobile Association is to incorporate. Incorporate what, please?

How many motorists have envied Mr. Glidden this week as he sailed away to continue his world-girdling trip?

Those fellows who don't want Senator Morgan to run the Ormond beach had better look out or the senator will go out by himself and look up another beach.

One might have guessed the Spaniards would not long hate America—they couldn't so long as they can buy good American cars so much cheaper than French cars. Nobody ever heard of a Spaniard having money to buy a navy, much less throw it away on fine French fixings.

It is reported that several American manufacturers attended the Paris show in order to come home with suggestions concerning the allotment of show space. Much abused American show managers might retort with the advice that they learn something else while they are there.

If all the factories of the country are running double shifts now and propose to keep it up all winter, it is safe to say the heads of the companies have some reason to know they will dispose of their outputs. All of which suggests that "a policeman's lot is not a happy one," and never will be.

The Democrat, of Shelbyville, Ill., says that an automobile has been driven from Chicago to New York in 76 hours. How can the country legislator be expected to be up-to-date with his legislation when the country newspaper is over a year to the bad with its news.

Notwithstanding the many charges that Russia is slow-going, she is first in the field with an automobile to be used in actual warfare. The only thing preventing other nations from getting ahead of Russia in this matter is the fact that they have been decent—or timid—enough, to keep on the side of peace.

Notwithstanding the popular impression that English courts are pretty severe, a judge over the pond was frank enough to state that personally he was opposed to automobiles, didn't want one and disliked them in all ways. Then he said there might be another side to the case and deliberately placed himself in the other fellow's place, with the result that the automobilist being tried was acquitted.

The state of Washington is not alone in its desire for a state law regulating automobiles; most every automobilist in the country is pretty sick of having to keep tab on the ordinances of a hundred or more little one-horse hamlets through which they must pass in traveling a hundred miles or so. And, by the way, the little burgs which are so insistive will find themselves subject to a little of their own medicine, coming from their respective state legislatures at no very distant date.

If the Ormond meet management does not work more swiftly than some of the track meet managers worked the past season they will get run over by the tide every day.

Automobile importers who feel that the 45 per cent duty is a burden, might break even with the government by having the muffler of each car filled with diamonds on the other side.

The press agent of the Importers' exhibition has sent out a list of swell and swelled persons who will serve as patrons of the affair, which consequently takes on the air of a chicken show or a charity ball.

The A. L. A. M. has ostensibly sent an expert to the Paris show to gather in a few ideas on standardization and other things which may prove of interest to American makers, among which, possibly, might be the Marcus car and other pre-Selden affairs.

THE WEEK

Breech between Florida East Coast Automobile Association and Senator Morgan over management of Ormond tournament threatened but prevented.

American cars reported being in favor in Spain.

Buffalo dealers arranging a schedule of uniform garage charges.

Charles J. Glidden sails from Vancouver, B. C., to continue his world-girdling trip.

Pennsylvania Superior court decides townships have power to regulate speed of automobiles.

Many factories reported running from 15 to 20 hours each day.

Cuban authorities give consent to holding of 200 mile road race.

Russian government sends automobile train to far east for use in war with Japan.

American Automobile Association decides to incorporate.

Expert sent to Paris show by Association of Licensed Automobile Manufacturers.

Fifteen French automobile makers reported building cars for the Bennett eliminating race.

A side entrance limousine reminds one of a big city with the "lid on" just before election.

Found—A piece of news in the Automobile; owner may have same by paying damages occasioned by the shock.

The Chicago Automobile Club will shortly have a home-talent minstrel show, if President Farson does not secure an injunction.

A Pennsylvania court says townships have the power to regulate the speed of automobiles. This is better than having constables and policemen turn the trick.

France is to have some fifteen or twenty makes and about forty cars represented in the Bennett eliminating race. Have the French makers nothing to do but build racing cars?

When Senator Morgan starts his 200-mile road race on the Cuban roads and the natives hear the thunderous exhaust of the four and six-cylinder unmuffled racing cars, they will think the Spaniards have struck the island again.

The Florida East Coast Automobile Association has acquired A. B. Tucker, or A. B. Tucker has acquired the Florida East Coast Automobile Association, or the Florida East Coast Tucker Association has acquired an automobile, or the Florida East Coast Automobile Tucker has acquired an association, or something.

A Binghamton, N. Y., paper says that W. K. Vanderbilt Jr., drew $57,600 in premiums at the Paris automobile show, and was only sixth on the list at that. It is further explained that his reward compensates for expenditures in speeding and perfecting automobiles. Welsh rarebit must be a common dish in Binghamton.

With the government officials looking into foreign countries for markets for American automobile manufacturers, did it ever occur to these same officials and their respective superiors that if the home government would give a little attention toward securing good roads at home—which will benefit all classess—they will give the American automobile makers all they can do to supply the home market, without going outside.

A western farmer thinks the automobile is not a necessary element in our industrial life and that motor cars should be banished, or something of the sort. Maybe the automobile does not occupy that happy plane now, but it will. That same antiquated, fossilized argument was put forth when the first canal was constructed, when the first railroad was built, when the trolley came into existence—and in most parts of the country the opinion holds good against good roads. It is a blessing for the farmer that the farmer does not run things entirely. Were he to be sponsor for all things good for himself and the general community this country would be where it was 200 years ago. Thank heaven all farmers are not that way, but so long as this is the rule the farmer is not a safe industrial leader,

FEUD IS AGAIN SETTLED

Influences Being Brought to Bear to Oust Morgan From the Florida Management Are Quieted

New York, N. Y., Dec. 19.—There seems to be trouble brewing over the management of the Ormond-Daytona tournament, which is to be held in Florida during the week of January 23, and unless affairs are settled within a short time the meet itself will lose interest for many and harm may done to the sport of automobile racing. The disagreement has reached an acute stage, which is regretted by everyone who has the best interests of the tournament and of automobiling at heart.

The difficulty seems to be over the management of the tournament, which has always been in the hands of W. J. Morgan, who originated the affair 2 years ago and who made it the event of international interest that it was last January. According to report the Florida East Coast Automobile Association, although having made arrangements with Morgan, is preparing to take the management itself, and has unfortunately done many things without consulting Mr. Morgan, who has already secured dozens of valuable prizes. He has also issued entry blanks for the affair, and up to this time his office has received ten or twelve entries. Mr. Morgan himself is in Cuba.

Some time ago Mr. Morgan, as manager for the Florida East Coast Automobile Association, announced that the races for the next tournament would be by invitation only. Although he was advised against making such a move, he said he was doing it under instructions from the association. Subsequently C. G. Burgoyne announced that he had had a meeting of the association called and that all the events would be open to the world. This announcement was made without consultation with Mr. Morgan.

About a week ago Mr. Burgoyne resigned as president and Edward M. Steck of Pittsburg was elected to the presidency of the association. It was then announced that he would undertake the management of the meet himself, with some one acting as secretary to assist him. Notwithstanding the fact that entry blanks had already been issued by Mr. Morgan, it was said a new program would be offered. The latter had gone to Cuba to arrange for a tournament there, which, it is said, will be held the week following the Ormond races.

On Saturday A. B. Tucker was appointed race secretary, and he will go to Daytona with C. H. Gillette, secretary of the American Automobile Association, to arrange a new program.

In the meantime motorists from all over the country are entering with Mr. Morgan, and included among those already received are the entries of W. K. Vanderbilt, Jr., W. Gould Brokaw, E. R. Thomas, Barney Oldfield, Louis J. Ross, A. G. Vanderbilt, H. L. Bowden, and Dr. Harold E. Thomas.

Whether these automobilists and whether those interested in the sport generally will stand for what looks like interference on the part of the American Automobile Association remains to be seen. The A. A. A. first took up the matter when it was announced that the entries would be closed, and it said that President Whipple was severe in his condemnation of those who granted a sanction for closed races. If the A. A. A. had a right to interfere because the events were closed is not stated in the rules.

The greatest feeling comes from the manner in which the attempted change of management has been made. It is admitted that the association has a right to have any manager it desires, but it is pretty well known that the association has been more of a figurehead than anything else, and that Mr. Morgan has secured the prizes, and paid most of the expenses; all for a gold watch that was presented to him last year. The change could have been made without much trouble, but it now looks as though the tournament would be less of a success on account of the conflict of authority.

If Morgan should withdraw all the prizes, it would mean a loss of prestige for the affair. On his way back from Cuba the senator is to meet President Steck and the executive committee of the Florida East Coast Automobile Association at Daytona, when it is hoped an adjustment of the affair will be made.

FLORIDA FUED IS SETTLED

New York, N. Y., Dec. 21—Special Telegram—It was learned today that A. R. Pardington would decline the chairmanship of the A. A. A. racing board next year. This he admitted to the MOTOR AGE representative, but declined to give reasons or to say who his probable successor would be.

The committee in charge of the Glidden touring trophy has decided to have a 1,000-mile tour beginning June 11 through New England to the White mountains and the Berkshires. Each car will be credited with a certain number of points at the start and points will be deducted for each minute lost in repairs. Consumption of gasoline per ton-mile will also be figured.

From Daytona comes the news that at a meeting Tuesday disagreement over the management of the Florida tournament has been settled, and that Morgan will continue to represent the Florida people. New entry blanks will be issued and entries can be made at the Automobile Club of America to Secretary Butler, to Secretary Gillette of the A. A. A. or to W. J. Morgan. There will be no radical changes in the program as announced.

USING AMERICAN CARS

Washington, D. C., Dec. 16—Advices from Malaga, Spain, set forth the information that the American automobile has come and conquered. It must be considered a satisfaction for American automobile manufacturers to know that their machines have, in the fifth city of Spain, triumphed over the models of every other nation. There are now about a dozen cars in Malaga, half of which are of American make. Three more American cars are now en route and it is understood that a number of other orders are about to be placed. Last year it was reported in MOTOR AGE that the possibility existed for the introduction of American cars into Spain, and results have shown that it only remained for the first car to make its appearance to insure future sales. The proportion of American automobiles sold in Malaga is all the more creditable when it is considered that our manufacturers suffer because of the lack of equitable tariff rates, owing to the absence of a commercial treaty between Spain and the United States.

BIG RACE IS ONLY TOPIC

French Automobile Public Talks Only of the Bennett Eliminating Trial Race and New Cars

Paris, France, Dec. 4—For the first time in the history of "show time" in the metropolis there is another subject which is talked about nearly as much as the salon de l'automobile. This year, while the show is one of the topics, the Bennett cup race the other. This year especially the international race is more in the minds of the French automobile world than ever before. A few years ago, when the French knew they were without rivals, they had no one to fear.

The victory of England in 1902 was considered accidental, but that of Germany last year made Frenchmen change their opinions. They knew the German car that won was good, but they really did not fear it over such a long distance. Thus they brought out the swiftest cars they could make. The car which won the eliminating race did it in such shape that France was ready to stake almost anything it had that the car would repeat its performance in the international.

There was nobody in that great field which started on the morning of June 17 whom Frenchmen really feared, yet they were somewhat uncertain when they saw the big German cars.

Makers, dealers and all others who take interest in automobiling have been at work preparing for the cup race, and the trade it is bound to bring. There was a time when the makers were anxious to let secrets leak out; this year it is different. The fact is not denied in most cases that racing cars intended for the French eliminating trial are being constructed, but that is all that is given out with the exception of the power.

Details about the cars? Not under any circumstances, and, as one maker said recently —"anything that is published concerning our racers will not be given out by us or with our consent, because all of our employes have been specifically ordered not to say a word. The time has come when we have to consider that other countries are dangerous competitors."

Thus far the ten concerns which took part in this year's eliminating trial—and five other concerns—are building new racers. At the Hotchkiss and Gobron-Brillie plants, three cars of each make are being finished. They will have 150-horsepower motors. Three Panhard and three Darracq 140-horsepower cars are being built; Mors will have three and Berliet, a newcomer, two 130-horsepower cars; Turcat-Mery, de Dietrich and Clement-Bayard will each have three 120-horsepower cars; Rochet-Schneider, the Ateliers de la Buire and Delaunay-Belleville, three newcomers for honors, will each finish two 120-horsepower cars; Richard-Brasier is to be represented by three 110-120-horsepower cars; Renault by three 90-horsepower machines, and Gardner-Serpollet by three powerful steamers. It is possible there may be others, and everything promises a great preliminary race.

There is one thing about which much complaint has been heard recently—the fact that no circuit has yet been chosen by the committee of sports of the Automobile Club of France. It may be said in its defense that more than half a dozen different circuits have already

been suggested, and that it takes time to look them over carefully and compare them. This work has been going on and it will probably be some time before the final battle ground is decided upon. While this may be embarrassing the unanimous opinion is that plenty of time should be taken in selecting the best roads, and this will no doubt be done.

PECULIAR CASE DECIDED

Providence, Dec. 17—After correspondence with A. R. Pardington, chairman of the racing board of the American Automobile Association, the decision of the judges in naming B. F. Blackinton the winner in the speed trial, irrespective of class, at the hill-climbing contest held by the Rhode Island Automobile Club at River Point, R. I., November 26, is upheld against a complaint entered by A. E. Morrison, who through Harry Martin entered a Peerless in the contest. The complaint was on the ground that the Peerless and W. J. Foss' Pope-Toledo tied in the time of 48 seconds and that in the run-off of the tie the Peerless made the time in 46 seconds, which was better by 14-5 seconds than Blackinton's time. The committee awarded the first winning of the C. Prescott Knight $100 silver cup, offered for fastest time on the course, to Blackinton, claiming that the record made in the try-over could not be considered as anything but a run for class position.

Mr. Morrison took exceptions, wrote to the chairman of the A. A. A. racing board, and the chairman in turn wrote to President Lippitt of the Rhode Island Automobile Association and called for the details. President Lippitt called attention to the fact that the contest was practically over when the tie was made and that Blackinton's time was the best made before the run-over. Regarding a claim made that the timing of the Peerless was erroneous, he stated that the majority of the timers agreed and that the award could not have been made in any other manner without manifest unfairness to Mr. Blackinton, who had on his first run up the hill made the best time until the try-out of the tie.

Chairman Pardington's response was that unofficially the board held that the stand taken by the Rhode Island Automobile Club's judges was tenable, and the incident is now considered closed.

LOOKING FOR IDEAS

New York, N. Y., Dec. 19—The example of foreign countries where trade organizations and automobile clubs sometimes send special delegates to some of the more important continental automobile shows for the purpose of either making reports or giving lectures about these shows, has been followed by the Association of Licensed Automobile Manufacturers, which recently sent an expert engineer to Paris, where he will study all the features presented in material, design and construction of the automobiles exhibited at the salon. He will also make a thorough investigation of the working methods not employed in America, besides gathering any other information which will be of value in reducing the cost in production and maintenance of cars.

Instead of making one single report of everything, the delegate will send a series of letters, accompanied with sketches wherever possible, and each of these letters will form a report. They will all be read and discussed before the superintendents and engineers' branch of the A. L. A. M.

TAKE TO MOTOR CYCLES

Vancouver Bicyclists Becoming Interested in Power Machines and Hold Many Races

Vancouver, B. C., Dec. 16—The introduction of motor cycle races on the local track during the past season has been marked by some substantial and almost sensational reductions in the existing track records. Although no special racing machines were employed in setting the new figures, the efforts of the fastest riders in Canada, aided by tandems, triplets and quadruplet pacing machines, have been set at naught and a cut of 22⅘ seconds made in the mile record.

The first motor bicycle race ever held in the history of British Columbia was contested on the Vancouver Bicycle Club's track on the Brockton Point grounds Good Friday. Five machines were entered, but owing to differences of opinion regarding proper handicapping, all but two were scratched. These were a 3 horsepower Mitchell owned by C. E. Stevenson, of Nanaimo, B. C., and a 3 horsepower Orient, ridden by H. J. Tucker, a local rider. The distance of the race was 5 miles and was won by Tucker's Orient in 12:05⅗. The contest was keen up to the last few laps, when the driving belt on the Mitchell came off and allowed Tucker an easy victory.

A number of attacks on the mile record were made during the summer by prominent motor cycle riders, and in each case the former marks were lowered and new ones established. From the summer of 1900 until the present season the mile track record has stood at 2:01. This year the record has been repeatedly lowered. The first slash at the record was made last Good Friday, when after winning his race against Stevenson's Mitchell, Tucker sent his Orient against the existing figures. There were fully 5,000 people present, it being the opening meet of the season. He succeeded in the first attempt amid the enthusiastic cheers of the big crowd, in placing the figures at 1:51 flat—a reduction of 10 seconds.

Then a little over a month later, at the Empire day meet Cocking, with a new 1¾-horsepower Indian, took a try at the record. Nearly 3,000 people were present when the attempt was made. With a splendid flying start the little machine circled the track four times in 1:48⅗. This was another substantial reduction.

Mr. Tucker with the Orient machine made another trial later on. After a few laps for a warming up trial he opened the machine and went at it. To his surprise, as well as to that of the followers of the game, the watches all indicated 1:38⅕ when he crossed the tape the fourth time.

Since then there have been several further attempts at the record, but owing to the nerve required to negotiate the corners at high speed no rider has succeeded in bettering Tucker's mark of 1:38⅕.

KIPLING ON AUTOMOBILING

Washington, D. C., Dec. 20—Rudyard Kipling, the noted author, recently wrote a letter to another author in which he says that he became an automobilist 7 years ago, in the days when 6 horsepower was reckoned fair allowance for a touring car and a speed of 15 miles an hour was something to talk about. "My agonies, delays, road-walkings, and burns * * * all went to make the car of today safe and comfortable. Any fool can invent anything, as any fool can wait to buy the invention when it is thoroughly perfected; but the men to reverence, to admire, to write odes and erect statues to, are those Prometheuses and Ixions—maniacs you used to call us—who chased the inchoate idea to fixity up and down the king's highway with their red right shoulders to the wheel. * * * Nowadays my car helps me to live at a decent distance from any town without sacrificing what the house agents call the amenities."

OLDFIELD'S NARROW ESCAPE

San Bernardino, Cal., Dec. 19—Special Telegram—One of the largest crowds that ever went to the local race track witnessed this afternoon the narrow escape from injury of Barney Oldfield. The premier driver of the country was racing against Charles Burman, who drove his stripped Peerless car and was given an allowance of 35 seconds in 5 miles.

Oldfield quickly began to gain on his competitor, although the latter went at a splendid gait. Something went wrong with the shaft of Burman's car and he gave up, while Barney continued at a rate of speed of 58 to 59 seconds to the mile. A mile before the last the driver of the Green Dragon, after passing the grand stand, suddenly swung to the outer edge of the track with the intention of cutting short into the back stretch and running the last mile faster than any of the preceding miles. While thus swinging around the turn a rear tire exploded. The big cloud of dust around the car brought the keenest anxiety to the large crowd. A few seconds later the car was again seen with Barney at the wheel, endeavoring to keep the machine straight. As if some one had given a signal, the spectators began to cheer. A moment later the big machine went out of its course and shot up an embankment, landing in the soft ground.

Barney kept trying to control the machine and finally succeeded. The driver simply said the track was too soft. Before this accident Barney had gone 5 miles in 4:57⅘.

MUCH RUBBER USED

Washington, D. C., Dec. 20—The recent advance in prices of and demand for rubber lends especial interest to some figures just compiled which show the quantity and value of rubber imported into the United States during the current year. These figures show that in both quantity and value the imports of the year about to end will probably exceed those of any earlier year. The largest importation in any complete fiscal year is 55,250,000 pounds in the fiscal year 1901, and the highest value in any earlier year is $31,707,630 in 1899. In the calendar year about to end, however, the indications are that the quantity imported will reach 60,000,000 pounds and the value more than $40,000,000. While Brazil furnishes a much larger share of the rubber imported into the United States than does any other country, the share that country contributes of the grand total of our imports of that article is probably not so large as generally supposed. During the past 10 months Brazil contributed 28,282,456 pounds of the total importation of 49,951,326 pounds.

RELATIVE TO CLUBS AND LAWS

Shows Healthy Gain—The Massachusetts Automobile Club was organized in 1901 with 110 members; today the club has 254 members.

Increasing Gradually — At the last meeting of the Auburn Automobile Club, of Auburn, Ind., six new members were elected, bringing the membership list up to twenty-eight.

Banqueted the Winners—The Motocycle Club of France gave a banquet a few weeks ago, the occasion being the presentation to the Griffon concern of the international motor cycle cup which Demester and Lamberjack had won for them.

Well Fed—At the banquet given by the Automobile Club of France November 30, the guests disposed of 4,500 sandwiches, ten roasts, fifteen hams, 290 bottles of champagne, 200 dishes of ice cream, 220 pints of cold coffee, 40 bottles of lemonade and 1,500 cigars.

After Thieves—At a meeting of the directors of the Chicago Automobile Club, held December 17, it was decided to prosecute automobile thieves, and Secretary Gorham was retained as attorney for the club. At the same meeting ten new members were admitted.

Officers Nominated—The annual meeting of the Automobile Club of Maryland will be held in Baltimore January 16. For the election of officers the following ticket will be presented: William Keyser, Jr., president; William F. Belding, vice-president; C. Warner Stork, secretary; Ernest Knabe, Jr., treasurer.

Up for Office—The annual election of officers of the Rhode Island Automobile Club, of Providence, R. I., will be held during the first week of January. The following ticket has been prepared for the election: For president, Dr. Julian A. Chase; first vice-president, C. Prescott Knight; second vice-president, Darwin Almy; treasurer, Howard D. Wilcox; secretary, Elliott Flint.

A. A. A. to Incorporate—Among the things to be considered at the annual meeting of the American Automobile Association to be held at the Hotel Seville, in New York, on Monday, January 16, will be the plan of incorporating. James B. Dill, chairman of the law committee, at the request of the directors, has drawn the incorporation papers, and they will come before the meeting for adoption. Following the meeting, which begins at 3 o'clock in the afternoon, the association will have its banquet.

St. Louis' New Bills—Three bills were introduced in the house of delegates of St. Louis last week regulating the identification of numbers, the cost of licenses and speed of motor cars. The bill was introduced through the agency of the local club. The first provides that the license number be placed in a stationary position, instead of having it sway back and forth, and also to be lighted by a white light. License rates are fixed as follows: Motor cycles, $2; one-seated cars, $3; two-seated cars, $5; three-seated cars, $6; four or more seats, $10; trucks of less than 1 ton capacity, $7; trucks of more than 1 ton capacity, $8. The speed rate is fixed at 15 miles per hour in the day and 10 miles per hour at night. An amendment was introduced requiring a red light to be carried on the front of the car from sunset to daybreak. Fourteen of the seventeen members present favored the bill, while the remainder were non-committal.

After Toll Roads—The Automobile Club of Syracuse has sent a letter to Martin L. Cadin, member of the assembly, commending his stand against toll roads in Onondaga county. This section is badly infested with the toll road nuisance and Assemblyman Cadin intends to introduce a bill in the legislature to abolish them.

Must Show Books—At a recent meeting of the Dallas Automobile Club, of Dallas, Tex., it was announced that the organization would be admitted to membership in the American Automobile Association when the latter is informed how many members the Texas club has. The new constitution and by-laws were adopted and will go into effect January 1.

After Members—At a meeting of the Automobile Club of Kansas City last week it was decided that in order to increase the membership the initiation fee of $10 be suspended and that new members pay the annual dues, $12. A solicitor will be employed by the organization to induce motorists to join the club. At the same meeting the club house proposition was discussed, but no definite action was taken.

Important Quaker Decision—An important decision was rendered a few days ago by Judge Orlady of the Superior court of Pennsylvania. A member of the Automobile Club of Philadelphia, Samuel Bell, Jr., was fined some time ago in the township of Radnor for driving at more than 10 miles an hour. Bell appealed and Judge Johnson, of Delaware county, dismissed his appeal. The motorist then took the case to the Superior court and claimed that Judge Johnson's decision was opposed to an act of the legislature, passed in in 1903, fixing the speed limit at 8 miles an hour in cities and boroughs, but permitting 20 miles an hour outside cities and boroughs. In affirming the judgment of the Delaware county court, Judge Orlady said: "The legislature has, beyond question, the power to provide for the construction and maintenance of the public highway, whether streets in cities or boroughs, or roads in townships, and it has as full and clear power to provide regulations for their use. It must also be conceded that this power may be delegated without diminution to a local municipality. A municipal corporation has for its objects the interests, advantage and convenience of the locality and its people. It is a local government possessing powers of legislation, within its delegated or reasonably implied powers, and is charged with the general welfare of the people. Some of the townships of the first class represent a larger population, and their highways are more used than those of many boroughs. We are not prepared to say that an ordinance limiting the speed of an automobile to 10 miles an hour is unreasonable when a lower rate of speed is prohibited by the legislature in less densely settled communities. The commissioners are prima facie the best judges of what is a reasonable speed for such a vehicle in Radnor township. No special fact is suggested in this record to show that 10 miles an hour is not a reasonable limitation, nor that 16 miles an hour—the rate at which the defendant was going when arrested—is unreasonable."

Prominent Speakers—Homer W. Hedge, chairman of the house committee, announces that the annual banquet of the Automobile Club of America will be held at the Waldorf-Astoria, New York, on the last night of the automobile show, January 21. This dinner will prevent many automobile enthusiasts from seeing the first day's racing of the Florida tournament, unless the promoters decide to begin the racing on Tuesday, as was done last January, or else have the first day's events of an unimportant character. Among the speakers at the club dinner will be Senator John H. Mitchell, of Portland, Ore.; Hon. Charles F. Warwick, of Philadelphia; William Phelps Eno, Winthrop E. Scarritt and P. F. Murphy.

Buffalonians Hustling—At its annual election Monday the Automobile Club of Buffalo chose for president Augustus H. Knoll, a prominent insurance man who is director also of the New York State Automobile Association. The other officers are: Vice-president, H. A. Meldrum; secretary, Dai H. Lewis; treasurer, Charles Clifton; members of the board of governors, E. H. Butler, E. R. Thomas and W. H. Baker. William Horace Hotchkiss, the retiring president, who has served as executive of the club since its foundation, received from the hands of Mr. Knoll during the evening a handsome Jones speedometer as a token of esteem for his earnest efforts in behalf of the club and of motoring. Speaking to the members after his election Mr. Knoll pointed out that one of the first things to be done is to increase the membership. He put emphasis on the advantages accruing to members of the local club through the fact that membership in the local organization gives membership also in the New York State Automobile Association and in the American Automobile Association. The next point he made was that the club hereafter will maintain at the secretary's office a valuable fund of information regarding routes, conditions of roads and many other points of interest to touring motorists. This information will be distributed freely to members but only to them, so that in that respect membership in the club will be of use to motorists. Mr. Knoll further said the club will take an active interest in promoting race meetings, automobile shows and club runs. The Buffalo club's membership has increased 140 during the last year, being now 445. Financially the organization is in first class condition. A year ago the cash on hand and assets amounted to $280, while today the cash on hand and actual cash assets are $2,480. Secretary Lewis announced at the meeting that plans for removing the club house to some more centrally located point will be pursued vigorously and it was intimated that the next step after that will be to secure club quarters outside the city at some point a convenient distance away so that the members might have the pleasure of a run to the clubhouse besides the advantages of a country location.

DISSENSION IN BUFFALO

Trade Association Holds Election and Has Opposition Ticket That Causes Ill-Feeling

Buffalo, N. Y., Dec. 20—The Buffalo Automobile Trade Association has just passed through a busy week. It has disposed of its annual election and begun its preparations for the coming automobile show. When the nominations for officers were made a few weeks ago it appeared on the surface that there was only one ticket and no chance for a contest. But those signs were misleading. On the night of the election a strenuous, although not well organized opposition did its best to elect a ticket entirely different from the one regularly nominated. The regular ticket was: President, E. R. Thomas; vice-president, J. A. Cramer; secretary, D. H. Lewis; treasurer, John J. Gibson. An abortive effort had been made to put in nomination a ticket with P. W. Eigner for president; J. B. Eccleston, vice-president; C. W. Roe, secretary, and treasurer, J. J. Gibson, but the attempt failed because too few members joined in signing the nomination blanks.

At the meeting, however, the opposition was not deterred by its failure to place its ticket regularly before the association. The friends of the Eigner ticket, however, mustered too few votes and Mr. Thomas was elected. As soon as the result was announced Dai H. Lewis resigned. He gave no reason, but some of his friends put it that it was one effect of the attempt to put through irregularly a ticket which had not been nominated in accordance with the rules of the organization. C. W. Roe, thereupon, was elected secretary and J. B. Eccleston was chosen to fill the place left vacant on the executive committee by the selection of Mr. Roe for Lewis' position.

Some of the opposition elements were satisfied on the final break and no other changes were made in the personnel of the officerships. It is understood, however, on the best authority that when E. R. Thomas returns from Europe in a few days he will resign immediately from the presidency because of the friction which seems to have resulted from the opposition to the ticket headed by himself. The executive committee members outside of the officers now are: E. C. Bull, P. W. Eigner and J. B. Eccleston. In innermost circles it is believed that some one of those three will be elected to succeed Mr. Thomas.

At this same strenuous election session Dai H. Lewis was chosen to manage the 1905 Buffalo automobile show. The full executive committee of the association consisting of the officers and the three additional members will act as a show committee. Space application blanks are being printed and will be ready for distribution as soon as the national association has passed upon the rules governing the awarding of room in the hall.

WANT UNIFORM GARAGE RATES

Buffalo, N. Y., Dec. 20—An effort is being made in this city to put in force the New York schedule of garage charges for the care of motors. The greatest variety of charges for care of machines at the automobile stations has marked the situation in Buffalo since motoring first became popular here. This condition has appeared to many members of the trade and proprietors of stations to be highly undesirable and in their tentative plans on the subject a general advance in charges has been suggested. The matter has not come officially before the trade association as yet but an informal conference has been held and action may be looked for before the active motoring season opens again.

Some of the station men interested in arranging a new schedule believe that Buffalo should adopt the scale now in force in the metropolis, $25 for large cars and $15 for smaller cars. Those charges are in force now at some Buffalo stations, but the minimum is far below that—$15 for large cars and $8 or $10 for little ones.

One thing which will be in favor of the stations if an attempt is made to advance the price of their service is that the demand for station accommodations has been, and still is, a bit in excess of the capacity of the existing garages. Several new stations have been opened here since the beginning of last season and others are contemplated now. Unless the increase in the number of stations becomes so great as to engender a much keener competition among the station proprietors for business than has existed in the past there would be no help for the motor car owner. He would need to pay the higher charges or go without the service. Yet, if the charges are made excessive, there will be others to enter the field and thus make the supply greater than the demand.

WANT MOUNTED COPS

Buffalo, N. Y., Dec. 20—Police Commissioner Doherty has just returned from a trip to New York so much impressed with the value of mounted police for keeping motorists from indulging in excessive speed, that he will ask the commission this week to detail several mounted men to Main and other down town streets. Mr. Doherty says the mounted cop has the bicycle cop beat to a finish in the matter of stopping speed law violators. "They work all right in New York," said Doherty, "so why shouldn't Buffalo have 'em, too?

"I saw a lot of mounted cops in New York," continued the commissioner, "and learned that they are specially effective in breaking up congestion of traffic and in holding up automobile speeders. I think they could do good work on the business part of Main street and other crowded thoroughfares.

"A policeman on a horse is much better than a bicycle cop as far as stopping a motor car is concerned. He is higher up and can see farther. Then, too, the mounted man does not have to worry keeping his machine balanced when he comes to a stop to do business.

"If the man on a horse tries to halt a motor driver and the driver refuses to be halted, the policeman can haul him from his seat. The policeman on a horse has his hands free, whereas the bicycle cop is lower down and his hands are engaged in guiding his machine. Besides, I think a horse-mounted copper is much more impressive in appearance than a mere bicycle rider, and that, therefore, motorists would pay much more attention to the man on horseback."

Mr. Doherty said he had consulted several citizens, who thought the idea a good one, and he will press it before his fellow commissioners.

TEST BY ITALIAN ARMY

Private Owners of Automobiles Aid The Officials in Conducting a Series of Maneuvers

Washington, D. C., Dec. 16—The war department has received an account of an interesting and successful trial of automobiles under the auspices of the Italian minister of war, in which it was demonstrated to the entire satisfaction of those concerned that automobiles can be used to advantage in war times. As horses owned by private parties are subject to requisition by the military authorities of Italy in the event of war, an attempt will be made to render automobiles subject to the same law.

Fifty owners of automobiles were invited to take part in the maneuvers, and of these thirty responded. Thirteen routes were selected, leading to various points on the eastern, western, and northern frontiers. All covered a considerable length, and many were difficult. One led to the fortress of the Spluga, lying at an altitude of 6,909 feet above sea level, and another to the Stelvio, at a height of 9,042 feet, which is the highest carriage road in Europe.

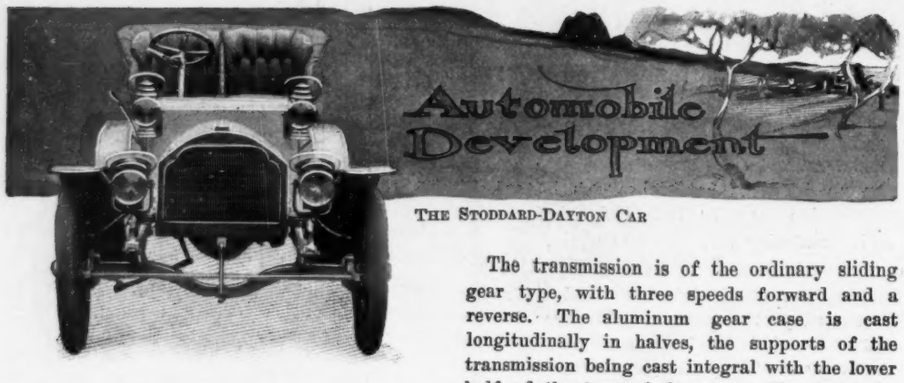
At dawn each chauffeur of the thirty cars participating left Brescia by a certain gate, and then opened a sealed order containing the route laid down for him. In view of the supposed invasion of the country by an enemy the routes were selected with regard to safety as well as speed. The distance had to be covered within 24 hours, and the military authorities made every preparation for verifying the routes, time of departure and arrival, etc. Copious notes, also, were taken in order to suggest improved methods in future trials. Some of the cars carried officers.

Every one of the cars returned to Brescia before midnight of the same day, and but one of them had an accident. Two cannon were transported by the automobiles, and bread and other supplies were taken to fictitious military camps. In rapid delivery of important supplies, such as heliographs, field telephones, etc., and for many other strategical purposes, it was found that the new service went beyond expectations. The longest distance covered was 335 miles.

War department officials in Washington regard the Italian experiments with war automobiles as among the most important that have been made in some time and they have served to renew interest in the subject among army officers in all branches of the service. High army officers do not hesitate to predict that the time is near when automobiles will figure largely in army equipment.

FERRY TROUBLE UNSETTLED

New York, N. Y., Dec. 19—As a result of the trial in the United States Circuit Court last week of the government against the ferryboat Texas, owned by the Brooklyn Ferry Co., for carrying a gasoline automobile across the river on October 14, Judge Adams has given both sides 2 weeks in which to submit briefs. The Texas is charged with violating section 4472 of the United States statute, which provides against the carriage of dangerous explosives as freight by passenger vessels and provides heavy penalties.



THE STODDARD-DAYTON CAR

STODDARD-DAYTON CAR

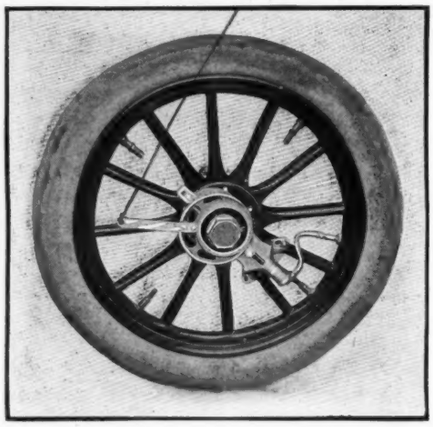
The Dayton Motor Car Co., of Dayton, O., is introducing the Stoddard-Dayton car, which is a modern four-cylinder, side-entrance touring car.

The frame is of ten-gauge pressed steel, made of hot pressed stock, said to be of higher carbon than cold rolled stock. The cross members and the gusset plates are all one piece, which does away with much riveting and bolting. The side members have a vertical spread of 3½ inches. These members taper toward the ends to receive the manganese bronze spring hangers. The springs are semi-elliptical, 40 inches long in the rear and 38 inches long in front. The front axle is of I section, and is all one piece, including both yokes, obviating all weldings or brazings. The tie rod is also one piece throughout, and is connected to one-piece knuckles, which are drop forgings with the arms and spindles bushed to receive the ends of the tie rod. The wheel base is 96 inches, with 56-inch tread. The wheels are 32 inches in diameter with 3½-inch tires of any make.

The motor used is a regular four-cylinder Rutenber motor, made by the Western Motor Co., of Logansport, Ind. The cylinders are of 4-inch bore by 4-inch stroke, and are said to develop 25 horsepower at 1200 revolutions per minute. The cylinders and water jacket are cast integrally, and are hence without packing. The parts of this motor are interchangeable, and it is claimed that any valve, piston, bearing, connecting rod or other part may be adjusted or removed without interfering with or removing any other part. The crank case is made of aluminum.

The ignition is an automatic jump spark system. A single high-tension French coil is used, with a timer so arranged and connected directly to the cam shaft that it follows the throttle in its timing of the spark. This automatic timing device is fastened to the dashboard and is self contained, embodying in its construction the governor, commutator and spark gap. The spark gap shows immediately which cylinder is missing should such an occasion arise. If the operator so wishes, however, this automatic timing device may be cut out and the ordinary hand spark advancer be attached. The lubrication is also automatic, the Hill Precision oiler being employed for this purpose. This oiler is directly connected to and driven from the cam shaft, and so arranged and set that it delivers an exact amount of oil at each revolution to each bearing, and also to the crank case and to the cylinders. The transmission runs in a bath of oil, and the differential is packed in grease, as are the cardan joints, which are covered by a grease bag made of leather.

The transmission is of the ordinary sliding gear type, with three speeds forward and a reverse. The aluminum gear case is cast longitudinally in halves, the supports of the transmission being cast integral with the lower half of the transmission case. The transmission shaft bearings are all fitted with very large, hand-scraped bronze bushings, and are oiled from the inside of the transmission case. The cover of the transmission may be easily removed by one hand lever, and when in place makes the case oil tight. On either end of the



THE HIBBARD TIRE PUMP ATTACHED

shifting rod there is a stuffing box filled with felt, to render the box oil and dirt tight.

On the main transmission shaft there is a brake drum of 7-inch face and 5 inches in diameter, which is operated by a pedal. It is said to be powerful enough to skid the wheels. A cone clutch of the dash-pot type engages the fly wheel of the motor, is also operated by the pedal, and is arranged to avoid end thrust on the bearings when it is engaged. There is a universal joint connection between the motor and the transmission gear. An interlocking device is used to obviate the possibility of shifting the gears when the clutch is engaged.

The final drive is by bevel gears, and a propeller shaft fitted with two cardan joints. The final drive bevel pinion and gear are of case-hardened steel and are of 1⅜-inch face. The differential is of the ordinary spur gear type, and is so suspended that one or both halves of the axle may be withdrawn without disturbing the differential parts. Double-acting, internal expansion emergency brakes are fitted to both rear wheels, and are controlled by a hand lever at the side of the driver's seat.

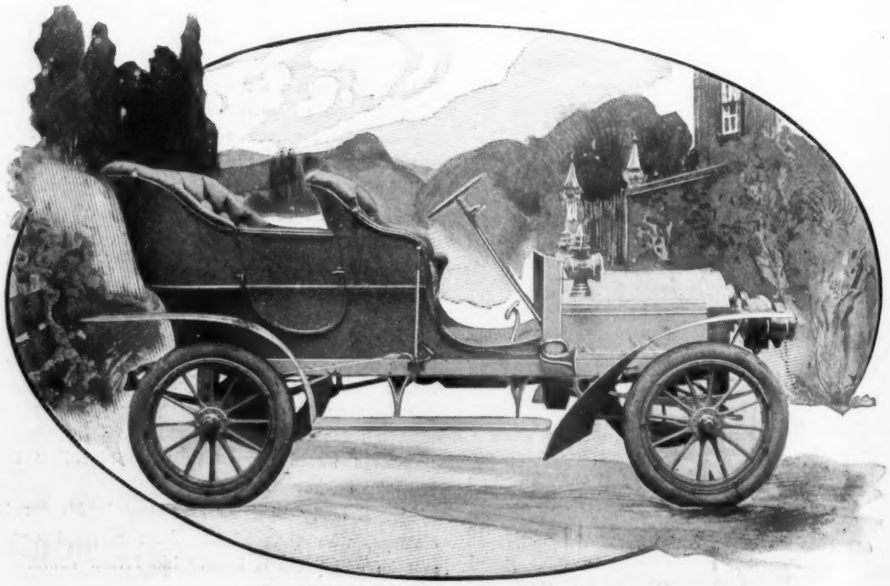
In the control of the clutch and brakes there is but one pedal employed, which, in the first degrees of movement, releases the clutch and in farther movement engages the transmission brake, while still further movement of it applies also the emergency brakes. The hand brake lever, in its initial movement, releases the clutch, then applies the emergency brake, and then the transmission brake; thus in all cases sufficient braking power is assured. The throttle is operated either by a pedal or a hand lever attached to the steering wheel pillar.

The body is a side-entrance tonneau, with an 18-inch door on each side. It is well upholstered, with spring backs and cushions. The concave dashboard is of mahogany. The standard color is pearl-gray, with tan upholstering, but any color desired will be furnished.

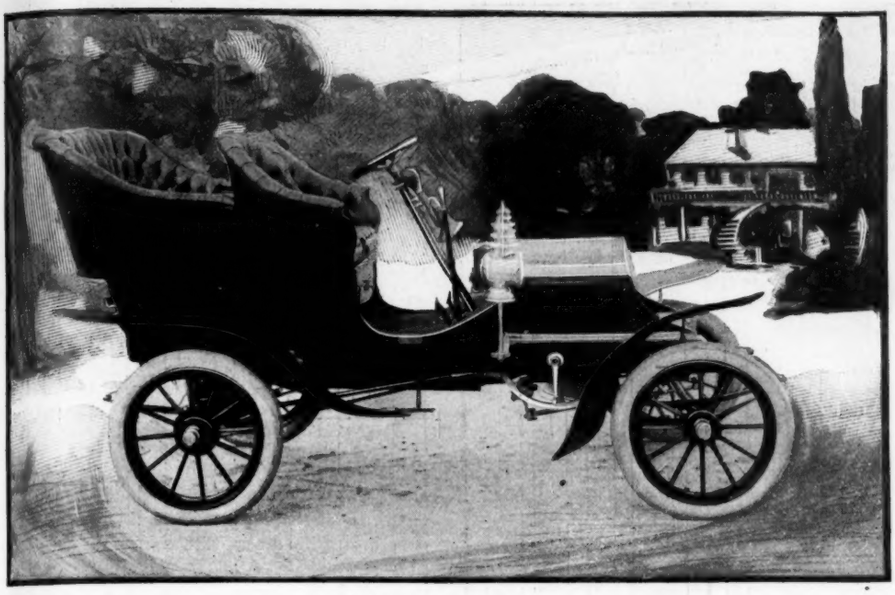
THE HIBBARD TIRE PUMP

McCord & Co., of Chicago, known to the automobile trade as the manufacturers of the McCanna lubricator, are introducing the Hibbard automobile tire pump. This pump is so fashioned that it may be attached to any automobile wheel of the artillery pattern, and is operative upon the turning of the wheel, so that it will inflate the tire while the car is running.

The device consists of a plunger pump mounted on a bracket that is clamped rigidly to the wheel spokes and has rubber tube connection with the tire valve. The pump is operated by means of an eccentric device which surrounds the wheel hub, and one member of which is held against rotation by a cord that is fastened to the mud guard or to any rigid portion of the car above the wheel.



THE STODDARD-DAYTON FOUR-CYLINDER CAR



THE 1905 FRANKLIN MODEL B

The pump is said to not only inflate a tire while running, but to force air into it faster than it will leak out of an ordinary puncture, and thus allow the machine to be driven home without stopping to repair the tire. The pump being fitted with a cut-out device, whereby it becomes inoperative when a pressure of 110 pounds is reached and maintained, it may be left on the wheel without danger of exploding the tire. Rear tires may also be inflated by applying the pump to the wheel, jacking-up the rear axle, and running the engine. Inasmuch as the pump is attachable in a very short time, it may conveniently be used interchangeably on all the wheels.

THE FRANKLIN MODELS

The H. H. Franklin Mfg. Co., of Syracuse, N. Y., will market six models of air-cooled cars next season, three of which are new.

Model E is a gentleman's roadster or light runabout, and is a new model, said to have a speed of 40 miles an hour. This model is ironed for a canopy top, is equipped with a 12-horsepower, four-cylinder, air-cooled engine, has a wheel base of 72 inches, weighs 1,000 pounds, and is equipped with tires 28 by 3 inches.

Model A is a two-passenger car, built to receive a detachable tonneau. It is of the general style of the 1904 model. The main distinction between it and model E is that the latter is lighter and does not admit of the attachment of the tonneau. This model is also ironed for a canopy top. The engine is of 12-horsepower and the wheel base is 78 inches. The front tires are 28 by 3 inches and the rear tires 760 by 90 milimeters. The tonneau is several inches longer and wider than last year.

Model B is a light tonneau four-passenger car. This corresponds to Model B of last year, with the exception that the tonneau is not detachable. The body is ironed for a folding top. The engine is of 12-horsepower, the wheel base 78 inches, front tires 28 by 3 inches, rear tires 760 by 90 milimeters, and weight 1,250 pounds.

Model F is a new model. It is built to carry five passengers and has a solid back tonneau with tilting front seat entrance. The tilting seat entrance gives the principal advantage of a side door tonneau without the long wheel base. The model is ironed for a folding top, has a 12-horsepower, four-cylinder, air-cooled engine. The wheel base is 78 inches, front tires 28 by 3 inches, rear tires 760 by 90 milimeters, and weight 1,250 pounds.

Model D is also a new model. It has a 20-horsepower engine, and a rated speed of 40 miles an hour. It has shaft drive, aluminum body, two side doors, and four-cylinder, air-cooled engine, the cooling of which is aided by a fan. The wheel base is 100 inches and the tires 30 by 4 inches.

Model C is a touring car of 30-horsepower. It has shaft drive, aluminum body and two side doors. The engine is a larger edition of the Model D engine. The cylinders are 5 by 5 inches instead of 5 by 4 inches, as last year. The copper flanges have been discarded and the regular cast iron cylinder is used. The engine is smooth running and is said to equal the smaller engine for efficiency. The car has a three-speed sliding gear transmission. The wheel base is 104 inches. The front tires are 34 by 4 inches and the rear tires 34 by 4½ inches. The weight is 2,400 pounds and claims the speed is 50 miles an hour.

The bore and stroke of the 12-horsepower motors is the same as last year, 3¼ by 3¼ inches. The cylinders and pistons are ground. The inlet and exhaust valves are mechanically operated and are interchangeable. A new feature is the supplementary exhaust port. The pump and tank are in one case. The essential parts are lubricated by an automatic pump, operated by the engine. The pump drives the oil to the base of the engine, whence it is distributed to the cylinders and interior parts by the splash system. The transmission gear runs in an oil-tight case, into which oil is fed from an oil-cup at the top. The wheels and axles are oiled in the usual way.

The engine base is aluminum and the front plate is in two pieces, and is removable by simply taking out four bolts. The base is much nearer oil-tight than heretofore. Inlet valves mechanically operated tends to do away with the clicking noise previously characteristic of the Franklin. The throttle and spark control is operated by two levers attached to the steering wheel.

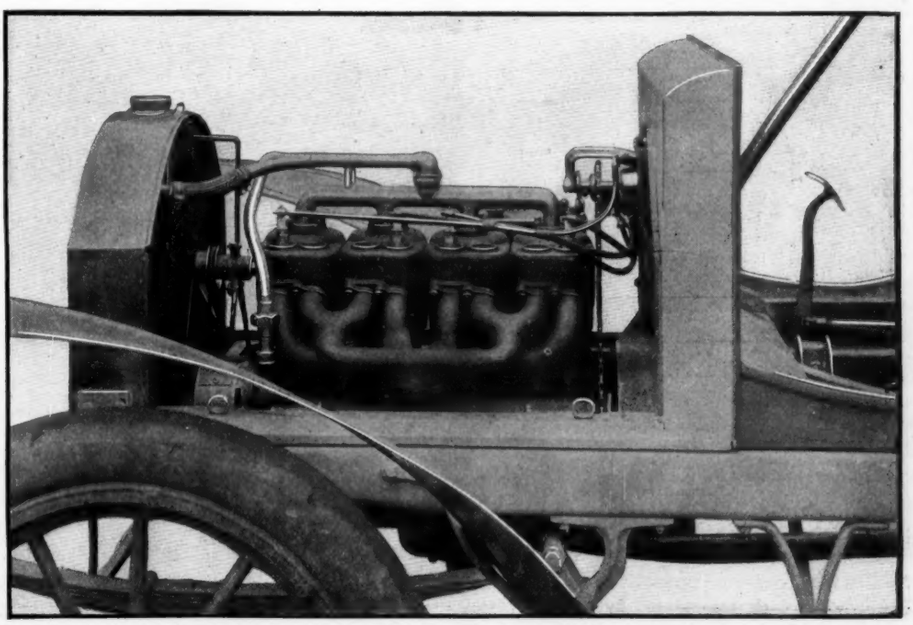
The gasoline capacity of the light car is 7 gallons, enough for 125 miles on ordinary roads.

The drive of all the 12-horsepower models is direct by chain from the transmission to the rear axle. The chain is heavier and in place of eight and thirty-six-tooth sprockets, nine and forty-tooth sprockets will be used. Raymond outside band brakes are used and the brake mechanism has an equalizer giving even tension on both brakes.

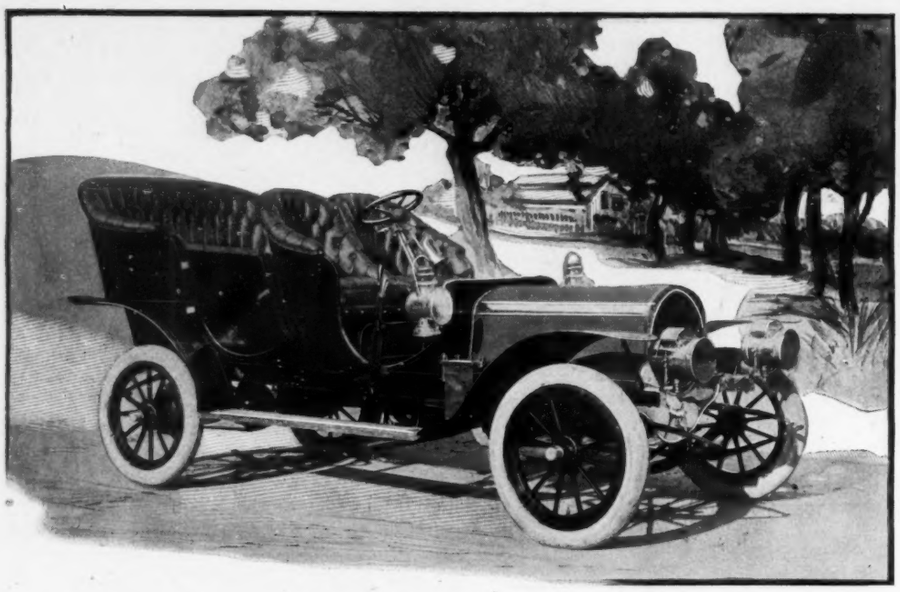
The bodies are aluminum on a steel frame. The general form is changed somewhat and the seats are higher and more luxurious. The speed lever is moved forward to a more convenient position, and the hoods are longer, giving the car a more powerful appearance. The colors for 1905 are red and green. The red is the same as 1904, and the green is new, being called the "Franklin green."

FOUR-WHEEL DRIVE ELECTRICS

The Commercial Motor Vehicle Co., of Detroit, Mich., is introducing heavy electric trucks and passenger cars built upon the four-wheel drive system, the principal peculiarity of the construction being the motor, which adapts itself to power unit axles that allow wheel turning in order to accomplish the steering of the vehicle, this steering being



VALVE SIDE OF MOTOR OF STODDARD-DAYTON CAR



THE 1905 FRANKLIN MODEL D

by electric power and acting on all four of the road wheels.

Generally speaking, the motor drives, through spur gears, a ball-bearing counter shaft parallel with the armature shaft and enclosed in an extension of the motor casing. This counter-shaft is provided with a spur pinion that meshes with a spur gear on the hub of the road wheel. All of the parts are grouped so that the motor, whose shaft is in line with the shaft of the road wheel and which is placed as close to the road wheel as possible, may turn with it in the movement which accomplishes the steering. The accompanying illustrations show the method of motor and wheel support by the axle structures, whereby this result is obtained.

One of the trucks built by the company weighs 16,000 pounds, is 23 feet long, 7 feet wide and has a capacity of 20,000 pounds. It is driven by four 3½-horsepower motors, and is capable of a speed of 6 miles an hour. The steering is by electric power on all four wheels, and each wheel has both electric and lever brakes. The current is supplied by an 80-cell 375-ampere-hour battery. It is said that the current consumption when carrying a load of 10 tons at 6 miles per hour is 100 watts per ton-mile. This machine has 36-inch wheels fitted with wooden tires 7 inches wide.

MOTOR TRUCK WHEEL

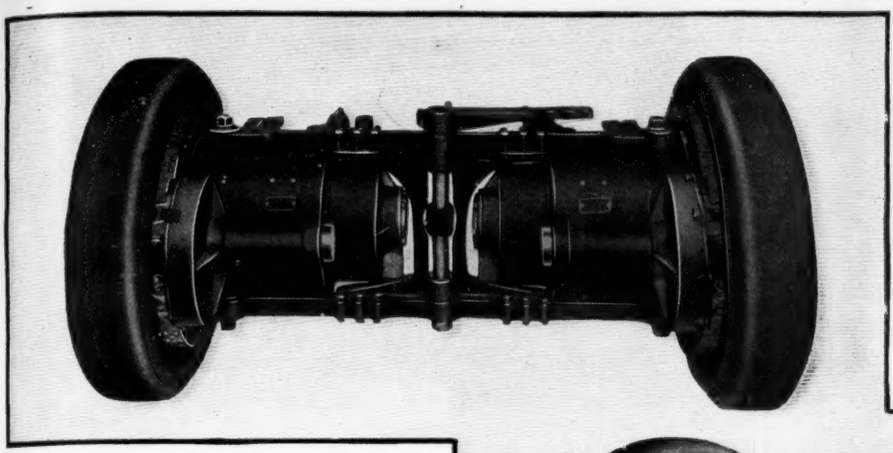
The Autraf wheel-tire is a direct result of the experimental work conducted the past year by the Auto Traffic Co. of America, which has offices in Pittsburg, Pa., and Washington, D. C. The inventor is H. Hubbard, a Pittsburg engineer, who has spent many years in road engine work. The manager of the Auto Traffic Co., S. J. Macfarren, has also had years of experience in electric railway traction engineering.

The Autraf wheel-tire is intended to meet the requirements of motor vehicles engaged in severe traction and carrying service. Recent tests of the tire have been made upon a 5-ton truck for a 6-ton load, which has been used a year, not only as a freight truck, but also as a shifting engine in a rough mill yard. During the 10 months that this truck, which has wheels of 8-inch tread and 36-inch diameter, was equipped with double solid rubber tires of the endless pattern it cost $90 to maintain the front or idle axle and $900 to maintain the rear or driving axle. One set of rear tires lasted only 1 month, although the mileage was only 20 to 25 miles a day.

Two months ago the Autraf tire was put on this truck. Today it is scarcely marked and it is estimated that $100 will cover maintenance and replacements for a year. This means that the Autraf tire will cost less than one-half as much as the solid rubber tire at first, and not over one-eighth as much for maintenance. The new tire, too, is said to be practically non-skidding. In fact, it has been tested especially to determine its tractive quality and the results are said to be much better than with a regular solid tire.

The accompanying illustration shows an Autraf tire on wheels designed for a 3-ton load each. They are of the cast rim and hub and wrought spoke type, common in farming and traction road engines. The hubs are double and the spokes staggered. The rims are of 8-inch tread and 36-inch diameter. Sixty cups 3 inches wide and 1 inch deep, with one-half the depth projecting beyond and one-half recessed into the rim are fastened on their circumference. A rubber cylinder 2½ inches wide and about the same length, weighing 1 pound, is set in each cup and is held by a ¾-inch bolt, which passes through both rubber and wheel rim to the retaining nut. The rubber segments are readily reversible. The bolts have flat button heads, under which are washers nearly as wide as the rubber. These heads and washers take the road wear and make a flexible steel surface. It is said that the traction is effective. The empty machine used for a test readily shifts four loaded box cars, of an aggregate weight of 150 tons.

THE WINTON FOUR-CYLINDER CAR, MODEL C



The Autraf wheel-tire will be manufactured in Pittsburg, it having received strong support from experieced traction men. A few sizes will be ready for market by January 1.

THE NEW WINTONS

As announced in MOTOR AGE some time ago, the new line of the Winton Motor Carriage Co., of Cleveland, embraces four models, all of them having four-cylinder vertical motors in place of the hortizontal engines heretofore standard with this company. Except as regards the size of motors and a few minor details of construction, the mechanical features are identical.

The motor cylinders are water cooled, with the chambers cast in pairs with heads, water jackets and exhaust valve chambers integral. One of the most striking features of the motor is its accessibility, as it is designed so that the crank shaft, connecting rods and pistons are instantly removable without disturbing the cylinders or motor appurtenances, and separating the cylinders from the crank case. The aluminum crank case is split vertically, one side being readily detachable. On this side are two openings, through either of which inspection may be made by turning a hand screw and lifting a cover.

If it is desired to remove the working parts of the motor, the entire side of the crank case may be detached by removing the bolts that hold it in place. As if to emphasize the fact that it is unnecessary to get beneath the motor for any purpose, a dust pan extending beneath the engine is a permanent fixture and cannot be removed. The forward end of the crank case encloses cam gears, fan pump, and magneto idler and excludes dirt from these working parts and permits liberal lubrication. The crank shaft, connecting rods and valves are drop forged. The crank shaft and crank pin bearings are long to minimize wear. The crank bushings are split, providing adjustment for wear. The inlet chambers are cast in pairs and bolted to the cylinders, having copper and asbestos gasket joints. Caps are placed over the inlet valves and may be unscrewed for inspection of the valves in operation. The exhaust is through one outlet for each pair of cylinders, leading downward and then longitudinally into an expansion chamber placed beneath the tonneau. From there the exhaust passes into the air.

But one carbureter is used. It is of the float feed type and is water jacketed and given water circulation by a shunt from the main circulating system, so that its operation is not easily effected by temperature variation. The carbureter adjoins the engine. The gasoline is pressure fed from a main tank placed under the tonneau, and it is thence gravity fed to the carbureter float. The gasoline passes into an auxiliary tank through a strainer which removes foreign substances. A pet cock on the auxiliary tank enables the operator to have gasoline near at hand for cleaning purposes, and it is impossible for gasoline to flow back from the auxiliary tank to the main tank. Extending through the dash is a hand screw by turning which the supply of gasoline may be cut off from the carbureter.

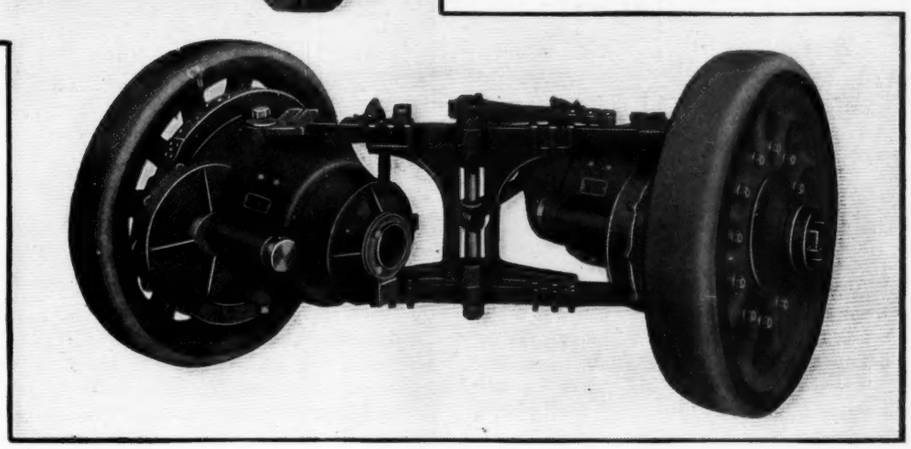
Ignition is by means of a gear driven alternating magneto in connection with a single non-vibrator coil. The magneto is directly connected, being driven by gears. It energizes the non-vibrating coil and from this the secondary current is returned to the magneto and distributed to the spark plugs through a mechanism integral with the magneto, of which the interrupting mechanism is also a part. A spark advance lever is attached to the steering column on top of the steering wheel.

A worm gear driven, roller feed lubricator is attached to the motor and extends through the dash. The oil is fed in direct proportion to the motor speed. A reservoir is placed above the cylinder and lubricating oil is fed by gravity to the lubricator, being received in a float chamber, whereby a constant level is maintained and oil flow is prevented when the motor is not running. From this chamber the oil passes into the main chamber of the lubricator, where a gear driven aluminum roller revolves in it. The viscosity of the oil being variable with the temperature, the thickness of the oil film on the roller would tend to increase as the temperature decreased, resulting in an excess of oil at low temperature. To obviate this action an adjustable metallic scraper carries off the superfluous oil, limiting the thickness of the film to the distance between the scraper and the roller. Passing this scraper the oil film engages a second scraper, in contact with the roller, by which it is directed in eqnal quantities through ten oil leads extending to all the bearings of the motor and rear axle.

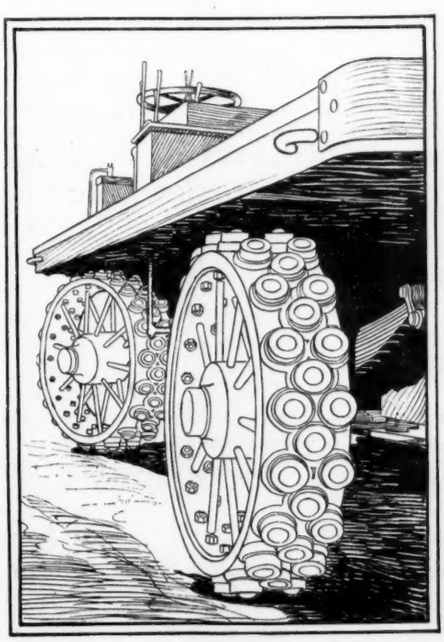
The location of the oil reservoir and lubricator, both being directly attached to the motor, assures fluidity at all temperatures by reason of heat passing through the bonnet. The crank shaft and connecting rod bearings have direct feed, so that splash lubrication is not depended upon. The transmission gears run in oil.

Bevel gear transmission is used, in connection with the individual clutch system which the Winton company has employed for several years. There are two speeds forward and reverse with direct drive on the high gear. The bearings are of bronze. The transmission gear case, made of aluminum and split horizontally, is located directly beneath the front footboard. There is a dust and oil proof case which can be removed quickly for inspection and adjustment by unscrewing a hand wheel. By removing four nuts, the upper half of the case may be lifted off and the transmission readily removed.

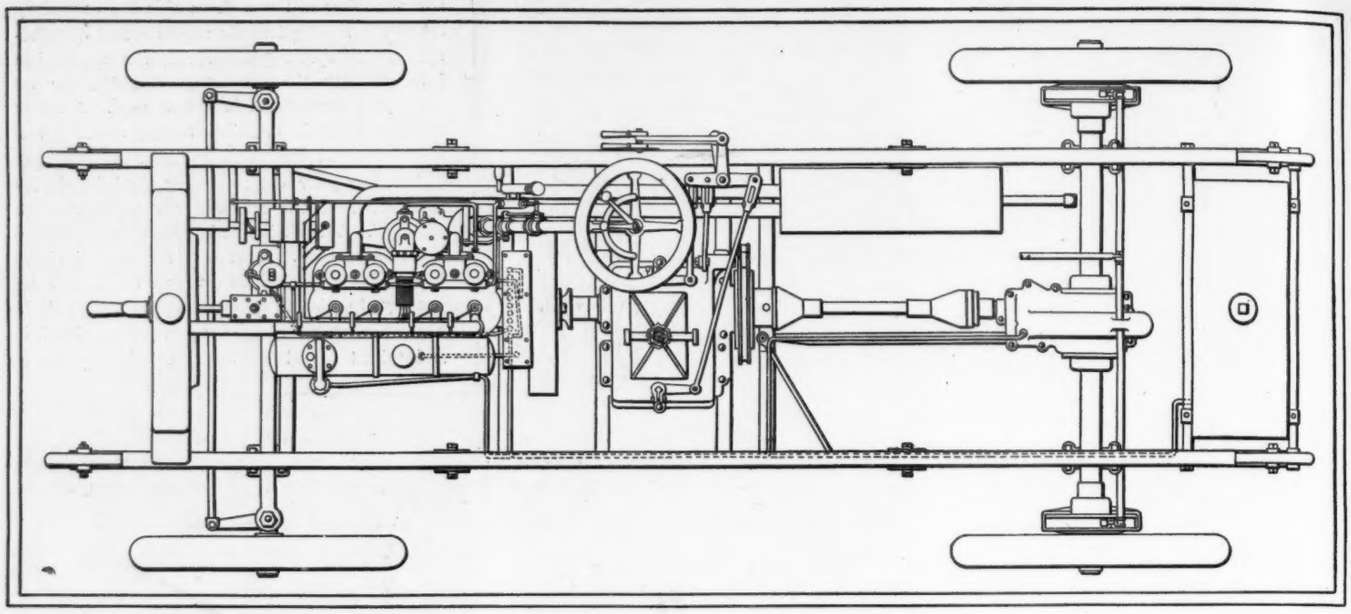
Water circulation is effected by means of a gear driven centrifugal pump. The radiator



THE COMMERCIAL MOTOR VEHICLE CO.'S HUB DRIVE SYSTEM APPLIED TO A HEAVY TRUCK



THE AUTRAF TRUCK WHEEL-TIRE



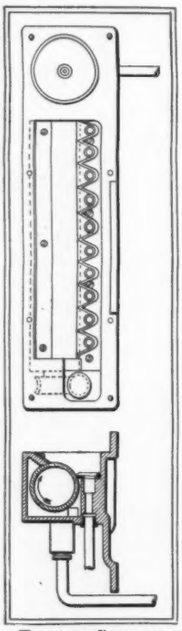
PLAN VIEW OF THE CHASSIS OF THE WINTON FOUR-CYLINDER CAR

is of the vertical tube type, provided with fins. Back of the radiator is a fan and there is a secondary fan in the fly wheel. Water is admitted to the radiator at the top and flows downward through a sieve distributor into eighty-nine copper tubes, each 17 inches long with 13-16-inch square radiating fins spaced 13-16-inch apart. The sieve distributor prevents the water from passing through any series of tubes in prefereence to the whole. From the bottom of the radiator the water flows to the circulating pump, which is at the lowest point in the cooling system. The pump forces water upward around the cylinders, the carbureter and the exhaust valve chambers into the upper water connection which directs it back to the top of the radiator. The fan back of the radiator is gear driven and surrounded by a casing to assure the maximum air current through the radiator.

The air governor control developed by the by the Winton company 2 years ago has been retained. The system throttles not the quality but the quantity of the mixture, the quality remaining always uniform, it is claimed. The throttle is actuated automatically by air pressure produced by a gear-driven pump located directly in front of the engine. This pump forces air against the plungers on the inlet valves and keeps them seated. Consequently the valves cannot open to supply mixture to the cylinders unless the pressure is relieved. This can be done by two methods—by means of a hand lever above the steering wheel, or by a spring button under the driver's right foot. By pressing either lever the air is released in a constant or variable volume, as the operator desires, so that the inlet valves may lift accordingly. The engine then draws a proportionate supply of mixture and reaches a relative speed. The pressure may be varied by minute degrees from the closed point to a point where the pressure is no greater than non-compressed air.

As heretofore, two levers and one pedal control all transmission clutches and brakes. It is claimed that the great majority of the time the car can be handled with the high speed clutch in, by varying the speed by means of the throttle. There is a band brake on the drive shaft operated by a forward movement of the high speed lever. Two powerful band brakes on the driving wheel hubs are operated by a pedal.

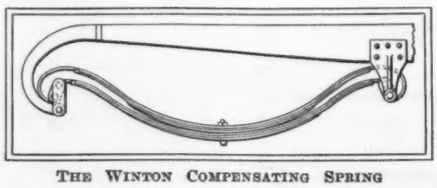
On the Model C the rear axle case is split horizontally and held in place by bolts. The other models have vertically split rear axle cases. Axles and wheel hubs are tapered to facilitate their removal. A single ball joint strut limits the axle movement and absorbs breaking strains. The axles are of solid steel. The wheels are keyed to the axle and held in position by nuts. All axles, front and rear, are fitted with roller bearings. The rear axle pinion shaft is hardened and revolves in a bronze bushing. The roller bearings and the alignment of the bevel gears are adjustable. The steering gear is of the screw and nut type. The wear is distributed on all threads to avoid lost motion.



TOP AND SECTION OF WINTON OILER

The side members of the frame are of one piece channel section pressed steel. No subframe is used, the motor and transmission being carried on malleable drop frames. The depth of frame varies from 1¾ to 5 inches. At the forward end the radiator casting serves as a frame spreader and also as a bearing for the starting crank. Between the rear spring, two cross tubes stiffen the frames and support the gasoline reservoir. Horns at either end of the frame support semi-elliptical springs.

The compensating springs introduced on the Winton "Quad" this year have been retained. A double spring of six leaves is so shackled that only three leaves are engaged when one or two passengers are carried, whereas six leaves are brought into engagement when the load increases.



THE WINTON COMPENSATING SPRING

A gasoline tank of fifteen gallons capacity is located at the rear of the frame. The only other tank is one of three compartments placed above the motor cylinders. The forward compartment acts as a receiver for the air line; the middle chamber carries the auxiliary gasoline supply, while the rear chamber carries the lubricating oil. This tank is higher than the level of the carbureter, so that the gasoline flows therefrom by gravity to the carbureter float chamber.

The starting crank is not detachable but is shifted into engagement through a spiral slotted sleeve, and out of engagement by a helical spring. When out of engagement it is held in a vertical position. The front axle is of the Lemoine knuckle type with forward steering connection.

The construction used on all external motor and transmission bearings, returns back to the case all oil that works out of the bearings. Drains are placed at the bottom of the crank case for removing of oil. They also permit of flushing. The top water connection supports fiber bushed rings carrying the wires to the spark plugs, tending to prevent short circuiting.

Between the motor and the transmission is a flexible coupling which accommodates itself to abnormal road conditions without straining the mechanism.

The Model A special has a limousine body with side entrance. The other models have tonneau bodies with side entrance, seating three passengers in the tonneau and two in front, the front seat being divided. Cast aluminum body panels support the laminated wood seats. The upholstering is of the usual Winton standard, made of hand-buffed leather, gray drawings, and 4-inch cushion springs, and made up on heavy sail duck with buttons wired in. Tonneau doors have pockets for gloves, etc. There are roomy lockers under the front and tonneau seats for touring paraphernalia. The mud guards are of laminated wood. There is a laminated wood running board at either side,

providing entrance to all seats. A silver gray finish will be used extensively on Winton cars this season. It is not quick to show the soil of travel, is easily cleaned, does not lose its lustre, and will outwear the ordinary color finishes, it is claimed.

The specifications of the various models are given in the table herewith.

MOTOR CAR LITERATURE

The Chicago Flexible Shaft Co., of Chicago, has issued a booklet entitled An Ounce of Prevention, which tells how an ounce, more or less, of Clark coal used in a Clark heater prevents the winter automobilist from being troubled by the usual annoyance and discomfort of cold weather riding. The Clark heater is produced in some twenty styles, many of which are suitable for automobile use. Clark coal is produced in bricks, and is said to supply heat at an expense of less than ½-cent an hour, a 6-cent cake lasting 16 hours.

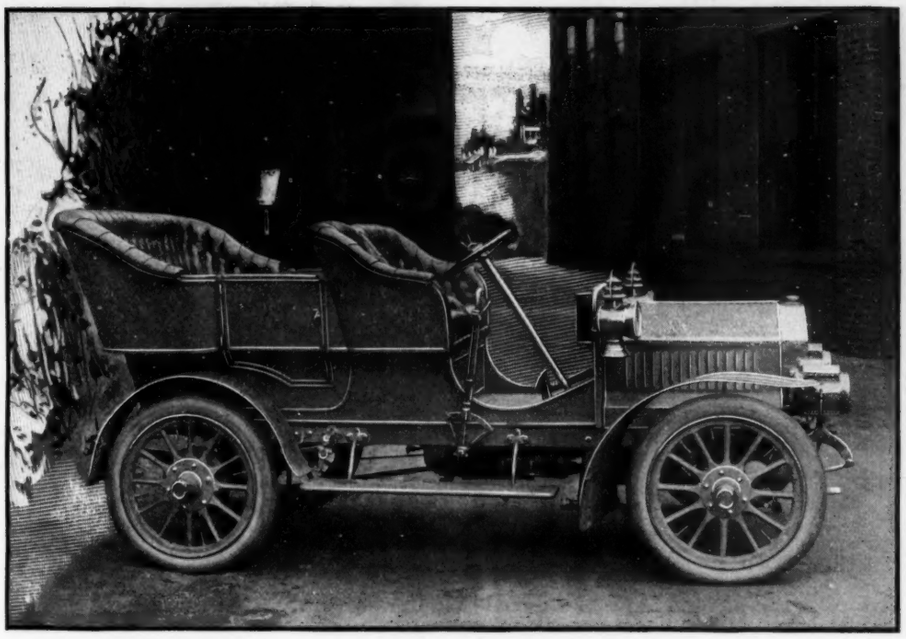
M. H. Fairchild & Bro., 199 Michigan street, Chicago, have issued circulars relative to Fairchild's Auto soap. This soap is useful for cleaning the bodies of automobiles, and also for cleaning robes and floor carpets; in fact, it is useful for washing all parts of a car which are not injured by water.

Cowan Rodgers, of Knoxville, Tenn., tells in a booklet just issued, his method of selling second-hand cars whereby he renders efficient service in getting together possible buyers and sellers.

The Breeze Motor Mfg. Co., of Newark, N. J., has issued a folder describing the Tourist 3-horsepower motor bicycle.

The Rambler Magazine is the title of the new house organ of Thomas B. Jeffery & Co., of Kenosha, Wis. The first issue contains excerpts from many newspapers and automobile papers in which the stories of the numerous conquests of the Rambler in the stock car racing game are told. Altogether the booklet is a very worthy production.

Walter Wardrop, who was a newspaper man before he was a class-paper man, and who was the latter before he became advertising manager for the Federal Mfg. Co., of Elyria, O., has evidently been unable to resist the desire to get back in the game, for he now appears as editor of the Automobile Builder, house organ of Hayden Eames, selling agent for the Federal and other companies producing automobile parts. The new paper, whose chief purpose is to interest the manufacturer of automobiles, is artistically gotten up, and contains a considerable variety of matter. It will be issued monthly.



THE NEW POPE-HARTFORD TWO-CYLINDER CAR, MADE BY THE POPE MFG. CO.

RECENT INCORPORATIONS.

Chicago, Ill.—Reo Automobile Co., capital $6,000. Incorporators, C. A. Coey, Anna M. Andrews and H. C. Foster.

Mobile, Ala.—Mobile Motor Car Co., of Mobile, capital stock, $25,000. Incorporators, Robert C. Morris, A. J. Spencer, Martin Van Heuvel, Joe Stone and Stewart Brooks.

Scranton, Pa.—Scranton Garage and Motor Co., capital stock, $25,000; to sell, store and repair motor cars.

New York, N. Y.—Manhattan Motor and Launch Co., capital, $100,000. Incorporators, William D. Stratton, James Dean, Milford H. Dunker and William D. Salter.

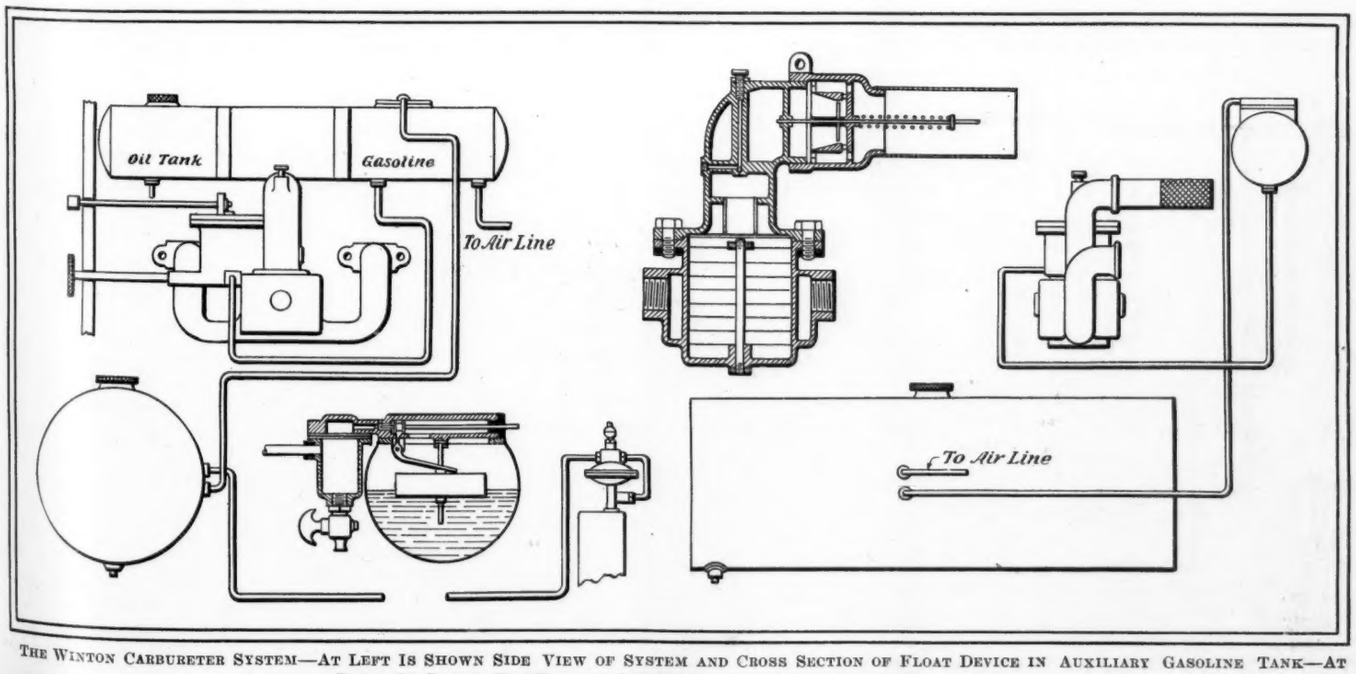
Boston, Mass.—Eastern Motor Vehicle Co., capital, $50,000. Officers, Charles G. McCutchen, president; Frank W. Richards, treasurer. Directors, Arthur T. Smith, F. L. Hanson, F. B. Hill, Charles G. McCutchen and Frank W. Richards.

Philadelphia, Pa.—Eastern Automobile Co. Incorporators M. E. Brigham, A. B. Cummer, George T. Thompson, H. K. Buck and J. R. Maynes.

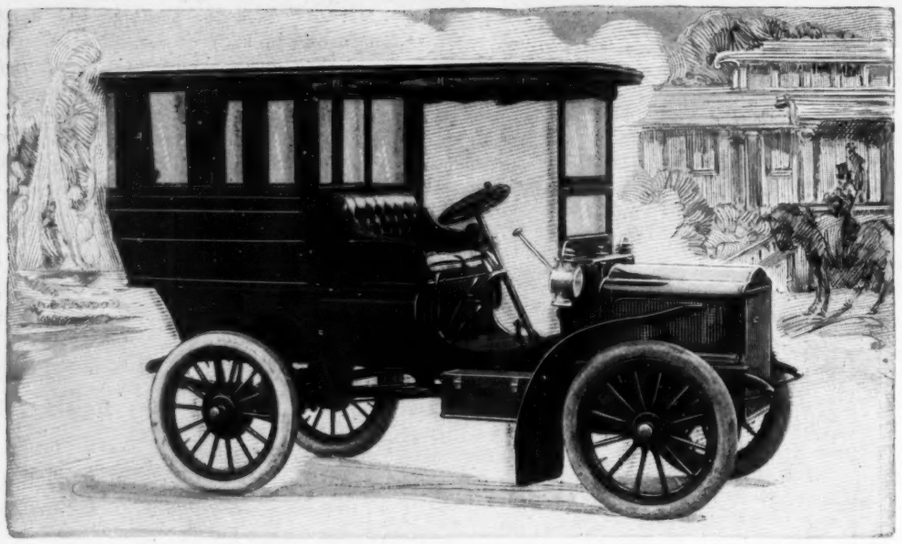
Columbus, O.—Curtin-Williams Automobile Co., capital $5,000; to make automobiles. Incorporators Thomas E. Curtin, Roy O. Williams, Charles Wardlow.

Model	A Special	A	B	C
Weight in lbs.		2400	2100	1800
Wheel base in inches	106	106	102	88
Horsepower	40	40	24	16
Bore in inches	5½	5½	4⅜	3½
Stroke in inche	6	6	5	5
Tires in inches	34x4½	34x4½	32x4	30x3½

SUMMARY OF WINTON MODELS



THE WINTON CARBURETER SYSTEM—AT LEFT IS SHOWN SIDE VIEW OF SYSTEM AND CROSS SECTION OF FLOAT DEVICE IN AUXILIARY GASOLINE TANK—AT RIGHT IS SHOWN END VIEW OF SYSTEM AND CROSS SECTION OF CARBURETER



THE LIMOUSINE MODEL OF THE 1905 WHITE STEAMER

Jamestown, N. Y.—Duquesne Construction Co., capital $40,000; to build automobiles. Directors William J. Maddox, Brewer D. Phillips and Frank L. Bliss.

New Haven, Conn.—General Mfg. Co., capital $500,000, of which $325,000 has ben paid in; to make automobile lamps and accessories. Officers W. S. Burn, S. C. Morehouse and Arnon A. Alling.

New York, N. Y.—Maxwell-Briscoe Co., of New York, capital $25,000. J. D. Maxwell, Richard Irvin and Benjamin Briscoe.

Norfolk, Va.—Virginia Automobile Co., capital $25,000. Officers Moses G. Nusbaum, president; J. W. McCarrick, vice-president; J. Roy Collins, secretary, and J. J. Hennelly, treasurer.

WHITE LIMOUSINE

The limousine body car shown in the accompanying illustration is a 1905 model White steamer manufactured by the White Sewing Machine Co., of Cleveland, O. In general chassis construction it is similar to the regular White touring car. The interior seats four persons comfortably, and is upholstered and finished in Russian leather. The windows are fitted with spring roller curtains of black silk, and the interior illumination at night is by means of incandescent electric lights whose current is supplied by a storage battery.

FLEXIBLE SPRING SUPPORT

Louis A. Hill, 1336 New York avenue, Washington, D. C., is the inventor of a spring suspension system for automobile frames whereby there is supposed to be a greater ability of the springs to absorb the vibration and varying thrust from both the motor and the road. The construction consists of four semi-elliptical springs placed upon the axles in the usual manner, with their outer ends hinged to the ordinary frame extensions. The inner ends of the semi-elliptical springs, however, are shackled to the ends of side springs, fastened at their centers to the side members of the running gear frame.

It is claimed that in effect the rear halves of the rear springs and the front halves of the front springs are comparatively rigid, while the spring portions between the axles are extremely flexible. The inventor claims that the system adapts itself to cars of all weights and wheel bases, and that as the wheel base increases, the compensating spring between the end springs is naturally increased in the correct proportion.

REO TWO-CYLINDER CAR

The Reo car, made by the Reo Motor Car Co., of Lansing, Mich., a front view of which was shown in MOTOR AGE recently, is herewith illustrated in side elevation. The car is equipped with a double-opposed cylinder 16-horsepower motor, fastened on a pressed steel frame, and said to give a horsepower for every 91 pounds of car weight. By unscrewing four bolts, each cylinder can be removed, and by moving four more, the whole engine and transmission can be taken from the frame. The exhaust and intake valves are mechanically operated and the bearings have large surfaces. One-piece-cylinders are used and each is fitted with special carbureter, directly attached to the outside cylinder wall, thereby tending to avoid condensation. The motor speed control is by the spark lead and throttle. The ignition is by the jump spark system, with a new form of commutator. The radiator is made of flat tubing, so that even if the water freezes solid, it will not be liable to burst. It is made in sections fitting together without screws or bolts, to make repairing easy.

The transmission is of the planetary type, furnishing two forward speeds and a reverse. There are no internal gears. The drive is direct from the engine to the rear axle when on the high speed. The body of the tonneau car is of the laminated wood. The individual front seats are curved, and the tonneau is comfortable for three people. It has a side entrance.

EXPENSIVE POWER

From a Minneapolis automobile dealer whose reputation for truthfulness is good, comes the following story of how a proud automobilist was laid in the dust—figuratively—by a lowly country liveryman. The northwesterner told the yarn to a MOTOR AGE man thusly:

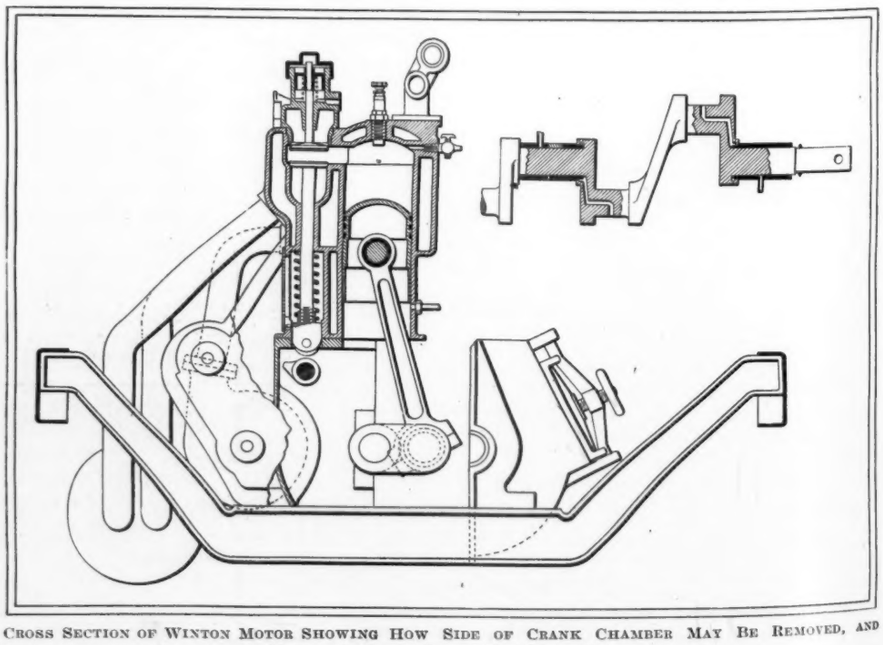
"They have a novel way of charging for automobile storage, among the livery stables of the northwest. Warren Freeman, whose trip with a Pope-Toledo from St. Paul to Wibeaux, Mont., was chronicled some time ago is authority for the statement.

"Mr. Freeman rolled into St. Paul last week with his 24-horsepower car, after having covered the round trip to his Montana ranch without mishap. On his return from Montana he traveled slowly and took his time to inspect the country through which he was passing.

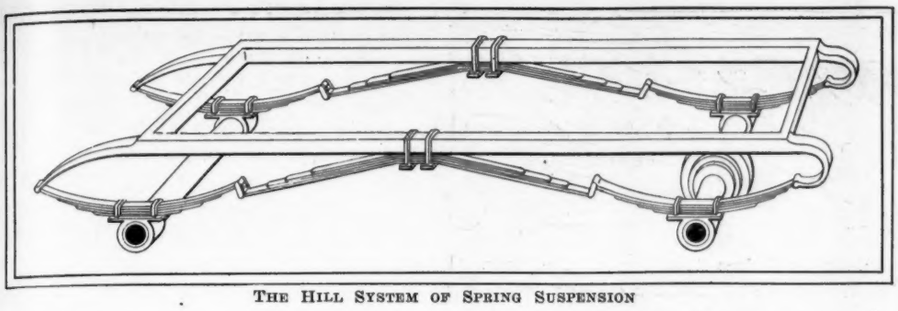
"One night he found himself in a small North Dakota town, with a good many miles of questionable prairie road between him and the next village. He decided to trust to the hospitality of the local hotel, and accordingly ran his big car into the village livery stable.

"The automobile was a big one, and the livery stable as small as a country stable usually is, so the car took up a good portion of the available floor space. No question was raised as to rates for the night, and Mr. Freeman slept the sleep of the just, with ne'er a thought of the bill that was rolling up to meet him.

"In the morning he braved the hotel ham and eggs, and then sallied forth to get his car. The livery stable proprietor was on hand to meet him, and began somewhat after



CROSS SECTION OF WINTON MOTOR SHOWING HOW SIDE OF CRANK CHAMBER MAY BE REMOVED, AND DETAIL SHOWING CRANK PIN LUBRICATION



THE HILL SYSTEM OF SPRING SUSPENSION

this peculiarly rural but very astute fashion:

"'That's a fine automobile—finest I ever seen.'

"'Yes, sir, it's a dandy,' said Mr. Freeman, with visible pride.

"'Must be a purty powerful machine,' said the liveryman as he inspected it.

"'Well, I should say so; 30 horsepower,' said Mr. Freeman, for it sounded better than 24 horsepower.

"'You don't say so?' said the livery proprietor. 'Well, we can't lower rates; our regular charge is 20 cents a horse, so I'll have to charge you $6.'

"Mr. Freeman is storing his car in St. Paul now, at a rate somewhat better than the North Dakota figures."

MOTOR CAR ROAD WAYS

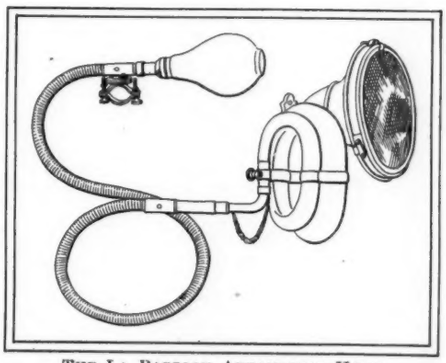
A. P. Hitchcock, a typical old-style farmer of New Lebanon, N. Y., in a letter to a daily paper suggests that automobilists should buy their own rights of way, grade them and fence them to suit themselves, just as a railroad buys its right of way and builds its own railroad. They should have the right and power to exclude all others from using their roads, just as a railroad has. They also should be forbidden to use the highways made for horses, just as a railroad is forbidden the use of highways in the countries. In his letter Hitchcock also makes the following statement: "We in the country cannot understand city conditions, and ought not to make suggestions or give advice concerning them. The automobile may be all right in the city; we don't know. But with us in the country it is today the most intolerable wrong we have to endure. Something has got to be done, and that soon, to relieve us. I hope and you hope, that this something may be in the form of orderly law, but if that relief is not found then the incapables who with power to enact a sufficient law refuse or fail to do so, will be held finally responsible for the disorderly and perhaps violent measures which surely will be resorted to by an outraged, abused, endangered public."

CAUSE FOR FRENCH SUCCESS

A prominent member of the French trade who has followed the automobile racing game in France for many years was recently asked what he thought made some of the French drivers successful. The question related particularly to Rigolly and Thery. The Frenchman said their success was principally due to the fact that they are first-class mechanics. Relative to Rigolly, he pointed out that his car is one of three, all identical, yet he is the only one among the drivers of these cars who has been successful and who has broken records with the same car. Rigolly takes the utmost care of his car and will stop immediately he notices something does not work right. Even in a race he will repair his car instead of driving on, as so many other drivers do. The Gobron-Brillie champion is very nervous, at the same time he is known to have an iron will. Thery, on the other hand, is a big, strong man, who is one of the best mechanics in France who never worries, and is always ready to start in any kind of road race.

MERELY A PLAYTHING

Not a very long time ago William O. Pierce contributed an article in the Indiana Farmer about how farmers feel in Indiana concerning the automobile problem. In the article Mr. Pierce says: "The automobile is not a necessary element in our industrial life, as is the traction. It belongs to the sporting realm; is a splendid machine on which to wager a bet; a thing of wealth and luxury and ruled out from the things that meet the necessities of our civilization." The writer also said he is an interested observer for the public good.



THE LA BASSOON AUTOMOBILE HORN

IMPORTED HORNS

Charles E. Miller, 97 Reade street, New York, is importing la Bassoon automobile horns, which are chiefly noticeable on account of the adjustable brackets that render it possible to attach the horns in any desired position on any style of car, and the adjustable bronze reeds which are used in the place of the stamped brass reeds found in some horns. The horns are spun from heavy brass, and are made on the double bend style, with an extra large coil in the body of the horn, tending to produce a deep bass tone. The diameter of the bell of the horn is 7 inches, and it is fitted with a screen, and with a 40-inch flexible metallic tube, although longer or shorter tubes can be supplied if desired. It is said that the bulbs are chemically cured and they are guaranteed for one year.

FAVORS MEDIUM PRICED CARS

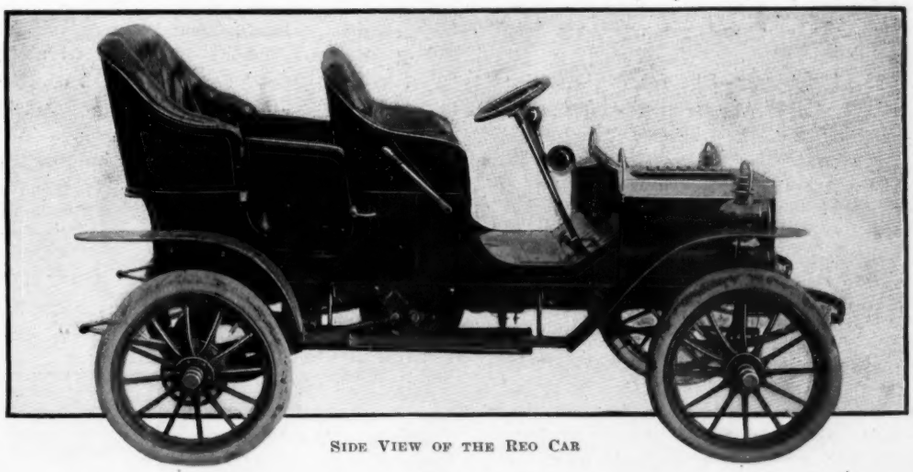
"While it may not be true everywhere Toledo the coming season will buy largely of the medium-priced machines," says A. D. Rivers, a Toledo dealer. "It is my opinion that there will be very few high-priced machines disposed of, while, on the other hand, there will be a big trade in the $2,000 class. We have not fully decided whether we will handle such a line; however, I believe we could do good business with both gasoline and electrics which would retail at $600 and $1,200. In fact I believe there will not be enough moderate priced cars and too many high priced cars to equalize the market."

THEATRICAL AUTOMOBILE

Rose Melville, the popular actress who is generally known as Sis Hopkins, is an enthusiastic motorist and had a special steel trucked railroad car built, in which her automobile, and the scenery used for the company is carried. Two attendants are always in the railroad car, which is so constructed that a passageway enables the automobile to be taken out easily and this is done in every locality where the actress plays. One of the first things she does after registering at the hotel is to take a spin around the town or in the country.

NEW FRENCH CAR

A new automobile manufacturing concern has been formed in Paris, France, by M. Romeuf, former foreman in the Mors, Darracq and Gladiator factories, and M. Perrier, formerly with the Darracq company and founder and manager of the Liberator concern. The new car will be known as the De Salvert and will be made with 15 and 20-horsepower motors. The models will be of fashionable city and touring styles. Speed cars may also be built, probably in patterns suitable for light car class events.



SIDE VIEW OF THE REO CAR

Gossip of the Garages

A NEW PITTSBURG GARAGE

Takes the Reo—Meadows & Hafer, of Buffalo, whose leading car has been the St. Louis, have taken the Buffalo agency for the new Reo car.

Sidney Buying—L'Auto reports that S. W. Bowman and W. T. Jones, the American agents for the Clement-Bayard cars, who are now in Paris, have placed an order for 100 of these machines.

Addition Ready—H. S. Moore, of Cleveland, O., recently completed an addition to his garage at 160-162 Crawford road, and will handle the Queen, made by the C. H. Bloomstrom Motor Co., of Detroit, Mich. Besides being agent for motor cars and bicycles, Moore handles supplies and accessories and does repair work.

Changed Hands—Dull & Munz, of Toledo, O., last week sold their Englewood garage to K. G. Johnston and William E. Tigges, the new firm name to be Johnston & Tigges. Mr. Johnston was formerly with the Lichtie Automobile Co. "We have not decided on our line for the coming season," said Mr. Tigges, to the MOTOR AGE man, "but we are open for a gasoline machine which will retail somewhere around $1,000. The Reliance was handled by the former concern last season. Our specialty will be repair work and vulcanizing."

Maxwell Quaker Agency—C. W. Kelsey, a prominent member of the Automobile Club of Philadelphia, has been appointed manager of an agency just established in Philadelphia, at 204 North Broad street, by the Maxwell-Briscoe Motor Co., of Tarrytown, N. Y. Prompt deliveries of the Maxwell touring car and runabout are promised customers. The agency includes the territory included in eastern Pennsylvania, southern New Jersey, Delaware and Maryland. The new concern was offered an option on the big Banker garage, on North Broad street, but the plant was too large for its purposes.

Naming Agents—The Toledo Motor Car Co., of Toledo, O., has closed contracts for a partial list of the line of automobiles it intends to handle during the coming season. The concern has sixteen counties in northwestern Ohio in which it will push the sale of the Haynes-Apperson, Pope-Toledo and Winton. Burton O. Gamble, general manager of the concern, is making a tour of all the counties and appointing agents in all the county seat towns. "I believe there will be big business in gasoline machines in the country towns," said Mr. Gamble, "and we are going after this trade with all the vim and vigor we have. As to other additions to our line, we have not closed contracts, but expect to before the first of the year. I believe we could handle a cheap gasoline car to retail at $600 to good advantage."

Lasted 3 Months—A. G. Hester has been appointed receiver for the Auto Express Co. of Toledo, O., which began business September 1.

Has New Sample—Alfred Comacho, who is now manager of the American Storage Co.'s salesroom in West Sixtieth street, New York, has received the first sample of the 1905 Franklin.

Will Not Sell—Joseph J. Mandery, proprietor of the Rochester Automobile Co., of Rochester, N. Y., denies the rumor that a stock company had been formed by local men to purchase his automobile business. The concern will handle the Winton, Locomobile, Packard and Columbia cars next season.

Abroad After Fiats—E. T. Bedford, one of the vice-presidents of the Standard Oil Co., has purchased a 24-horsepower Fiat from Hollander & Tangeman. To hasten deliveries the firm has sent T. F. Mulford abroad and he will make his headquarters at the Turin factory in Italy until all the show cars are shipped and the regular orders are under way.

McDuffee's New Place—The McDuffee Automobile Co., which will handle the Stoddard-Dayton, Wayne and Baker cars in Chicago next season, will move into the two-story building now being erected at 1449 Michigan avenue when completed. On the first floor, 25 by 161 feet, the salesroom and receiving room will be located. The showroom will be 25 by 96 feet, nicely decorated. The fore part of the second floor will be used for salesroom for electric vehicles and for office purpose, while the rear and large part of this floor will be used as repair shop. There will be plenty of light, which will be provided through three large skylights and large plateglass windows in front and in the rear, while large front and rear entrances will be provided so that cars can be driven through them.

Big Seattle Garage—The Broadway Automobile Co., of Seattle, Wash., is the latest concern to make its appearance in the far west and probably one of the largest along the Pacific coast. The capital stock of $15,000 has been paid up and those interested in the enterprise are full of hope about a good season. The president of the company is F. A. Wing, who has been one of the leading automobilists in the state for many years. The other officers are: W. G. Norris, vice-president; C. L. Roy, secretary; Edward W. Herald, treasurer. These officers and H. B. Hallam and Joseph W. Parker are the trustees. J. B. Wing will be sales manager. A brick building now being built will be used as salesroom, garage and repair shop and will have room for seventy-five cars on the ground floor. The Winton and Cadillac will be handled and probably an electric vehicle.

Handles the Reo—Louis A. Howell, formerly of Boston, is now the manager of the New York branch for Reo cars. It is located at 138 West Thirty-eighth street, New York.

Now in Bloomington—A garage and repair shop was opened some time ago at 215 South Main street, Bloomington, Ill., by J. L. Murray, formerly engaged in the bicycle and automobile business in Buffalo, N. Y.; Chicago, Ill., and Elgin, Ill.

Ready for Business—The Maxwell-Briscoe Motor Co. is now located in its new quarters on Fifty-ninth street, formerly occupied by the Packard Motor Car Co. Colonel Pardee, the manager, is preparing to convince old automobilists with the truth of the company's motto about Maxwell cars—"perfectly simple, simply perfect."

Hot After Trade—A vigorous campaign is being started by the new Harrolds Motor Car Co., which has the agency in New York for the Pierce cars and for Oldsmobiles. The new salesroom just opened at Broadway and Fifty-eighth street is in the heart of the automobile district and on the line of travel to Central park. Harry Unwin is in charge.

Visiting Garages—Henry J. Hicks, who had charge of the exhibit of the National Motor Vehicle Co., of Indianapolis, at the world's fair, left Indianapolis recently on a business trip through the south in the interest of the Indiana concern. The route will include Louisville, Nashville, Memphis, Atlanta, New Orleans and points as far south as Mexico City. George M. Dickson left the same time en route for the coast and will visit Denver, Salt Lake City, San Francisco, Los Angeles and other cities.

Fawkes Place Opened—The new garage of the Fawkes Automobile Co. in St. Paul has been opened to the public. The Fawkes agency, which now controls the Rambler for the state of Minnesota, occupies a new building recently erected at 95 and 97 East Fifth street, St. Paul. The garage extends through both numbers, the entrance being at 95, and the floor space thus secured is large enough to handle a great many cars. J. S. Spargo, former managing editor of the Minneapolis Times, and lately a prominent factor in the automobile events of the northwest, is manager of the St. Paul branch.

Big Agency at Ft. Wayne—William H. W. Peltier and William M. Griffin recently formed the firm of Peltier & Griffin, at Ft. Wayne, Ind., to handle automobiles and engage in the storage and repair business. The concern has secured the agency for northern Indiana of the Winton, Pope-Toledo and White cars, and will also handle a number of runabouts and smaller touring cars. An option has been secured on a large building located in the center of the town, which will be vacant about the first of January. The building will be remodeled, the first floor being used as salesroom and repair shop, while the second floor

will be used for storing cars. A charging plant for electric vehicles will also be arranged on the main floor.

Peerless on the Coast—Peerless cars will be handled next year in San Francisco, Cal., by the Auto Livery Co., which has an extensive renting business in the California metropolis.

Line of Three—The Orient, Cadillac and Northern cars will be handled in Rochester, N. Y., by Fred A. Mabbett, who has become the owner of the Rochester Motor Car Co., 189 West Main street.

Handles Imperial—The Imperial car will be handled in Dayton, O., by the Dayton Automobile & Rubber Co., a new concern which opened a salesroom a few weeks ago. As the name indicates, the concern will handle tires and other accessories.

Orange Has New Place—A new garage has been established in Orange, N. J., under the name of Orange Automobile Garage. The concern will handle a line of cars and supplies and do repair work. R. Arthur Heller and Frederick C. Hinni are the owners of the garage.

Acme Opera Car—Develin & Co., the new concern recently organized in Chicago to handle the Acme cars, received the first of these machines a few days ago. It is a two-cylinder 16-horsepower opera car. The car seats six persons, has electric lights, and among other features a speaking tube which communicates with the driver of the vehicle. The first four-cylinder touring car is expected before Christmas.

Getting Sub-Agents—The Amos-Pierce Automobile Co., of Syracuse, N. Y., is established in its quarters in South State street and is getting sub-agents in Cayuga, Cortland, Oswego, Madison, Jefferson, St. Lawrence, Oneida, Herkimer and Onondaga counties. The company will handle the Pope-Toledo, Peerless, Columbia, Olds, Stevens-Duryea, Buffalo Electric, Pope-Waverley, Pope-Hartford and Pope-Tribune. It will also sell motor boats. The building is the one formerly occupied by the J. S. Leggett Mfg. Co. and has 60,000 square feet of floor space.

New Chicago Garage—The new salesroom of the Pardee-Ullmann Co., of Chicago, which will handle the Packard and White cars exclusively, will be erected at 1218-1220 Michigan avenue, and it is expected that the new home will be completed about March 1. It will be a two-story structure, 50x171 feet, with an entrance in the middle of the building large enough to enable cars to be driven through it, although it is not the intention that automobiles be either received or sent out through the Michigan avenue entrance. A space 50 by 60 feet on the main floor will be used as salesroom, the floor being of tile, and the remainder of the floor is to be used as a garage, in which there will be a washbasin 25 feet square. The second floor will be used as a repair shop and will have the advantage of six large skylights, besides plenty of windows, thus giving good light at all times. Other modern features will be used in the building, which will be one of the finest in the city. The local agents for the Detroit and Cleveland cars have decided to do some renting business next season, which will be confined to the cars they represent.

FACTORY TALK

Doubled Capital—The capital stock of the Welch Motor Car Co., of Detroit, Mich., was recently increased from $50,000 to $100,000.

Joins Olds Force—Walter O. Adams, formerly assistant sales and business manager of the Ford Motor Co., of Detroit, Mich., has joined the Olds Motor Works of the same city in the capacity of head of the export sales department.

Receiver for Gibbs—The Gibbs Engineering and Mfg. Co., of Glendale, N. Y., was forced into bankruptcy a few days ago by an involuntary petition of some of the creditors, of whom there are 285, it is claimed. The debts of the company amount to $168,729.33 and the assets to $140,966.21.

Studebaker Enlarging—The Studebaker Automobile Co., of South Bend, Ind., is having erected a new plant, which will be used exclusively for the building of cars. The factory will be located on Sample street and will be 278 feet by 165 feet, being a five-story structure, with basement.

Addition for Marion—A new two-story brick building for finishing and assembling has been under construction during the last 2 months by the Marion Motor Car Co., of Indianapolis, Ind. It is expected that the building will be completed by the first of the year and will enable an output of 350 cars.

Pope Cars at Florida—The Pope Motor Car Co., of Toledo, O., last Friday shipped two racing and one stock car to Florida for the Ormond-Daytona tournament. One of the racers is the six-cylinder 90-horsepower machine, claimed can be geared to 115 miles. The other car which will enter the races is a four-cylinder 24-horsepower machine. A. C. Webb, who will drive, has been at Webb City, Mo., where he has been visiting with his parents. He arrived in Toledo a few days ago and will go to Florida this week.

Street Cars and Motor Cars—The St. Louis Car Co. has increased its capital from $2,500,000 to $3,000,000 and has bought a manufacturing plant with floor space of 100,000 square feet wherein to produce automobiles. The work of remodeling and fitting out a factory has already begun and by the first of the year, or soon after, the St. Louis Car Co. expects to have a large force of men at work making cars. The company will manufacture three cars of 18, 24, and 50 horsepower, to sell at from $3,000 to $8,000. It will also put out a runabout to be sold at $650.

Acme's New Line—The Acme Motor Car Co., of Reading, Pa., will make four models for next season's trade—a runabout with a single cylinder vertical 8-horsepower motor, a runabout with a two-cylinder 16-horsepower motor, a light touring car with a two-cylinder 16-horsepower motor, and a touring car with a four-cylinder 30-horsepower motor and having side entrance. The concern expects to place 800 cars on the market and a force of nearly 180 men is now working day and night in the different departments. This force will be increased by over 100 men when the new machinery is installed.

After a Factory—Business men of Bath, N. Y., are trying to raise $10,000 to form a stock company and thus have Charles Kirkham, of Pleasant Valley, N. Y., remove his factory to Bath. Kirkham makes motors of various models and sizes.

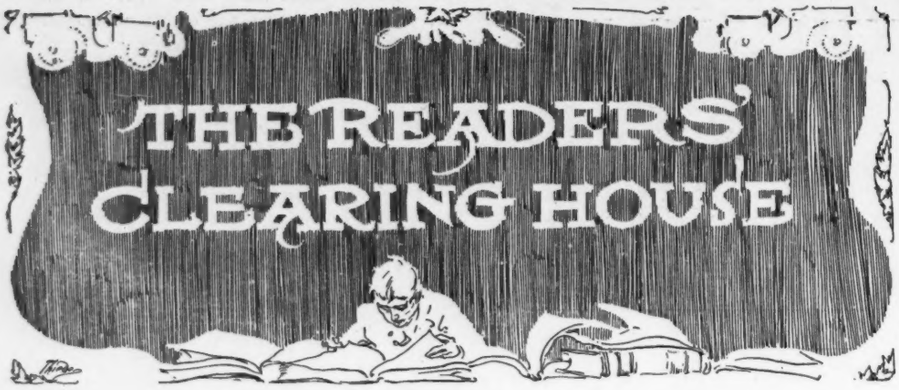
May Start Searchmont Plant—It was reported in Trainer, Pa., where the plant of the former Searchmont Automobile Co. is located, that the plant may again be put in operation. All that is needed is capital, inasmuch as all the machinery is still in the factory.

Increased Capital Already—The capital stock of the Knox Motor Truck Co., of Springfield, Mass., was recently increased to $150,000. The work on the new factory is progressing rapidly and it is expected that the plant will be ready for occupation about March 1. When completed it will be one of the most up-to-date automobile factories in the land. The first lot of cars of the concern is being finished at the Baush Machine Tool Co., Springfield.

Working Full Force—The James Brown Machine Co., of Pawtucket, R. I., manufacturer of the Cameron cars, is running its factory to its full capacity, 20 hours out of 24, besides having put on an extra night force. The concern has also decided to try for honors in the racing game and is building a six-cylinder 50-horsepower racing machine and an eight-cylinder 90-horsepower car. The latter, it is claimed, will develop a speed of 90 miles per hour.

Swell Bodies for Swells—C. P. Kimball & Co., of Chicago, the carriage makers, are becoming extensively interested in the automobile industry. The Kimball people have undertaken the production of high-class bodies, both for manufacturers and for automobilists who wish to build-over their machines. Mr. Kimball has recently returned from Europe, where he has been studying the prevailing styles, and expects to produce this winter some of the most artistically designed bodies that will be seen next season. Just now several bodies for New York show vehicles are being produced in the Chicago plant.

Moving Iroquois Plant—The J. S. Leggett Mfg. Co., of Syracuse, is preparing to move to Seneca Falls by January 1. A new company to be known as the Iroquois Motor Car Co. is being formed to take over the stock of the Syracuse concern and it is expected that cars will be turned out to supply the spring trade. H. Chamberlain, a prominent wool manufacturer, has become interested in the new concern and has turned over the large four-story building which he owns to the company. This building, which was formerly occupied by the National Yeast Co., is 175 by 50 feet. The machinery at the local factory in South State street will be moved and has already been packed up. The capital stock of the new company will be $450,000. The bodies and all parts will be made in the new factory. Fifty men will be employed at the start and the number will be increased as more are needed. J. S. Leggett will be manager of the concern. The company will manufacture two cars, 24 and 12 horsepower models.



ANTI-FREEZING SOLUTIONS

Britt, Ia.—Editor MOTOR AGE—My local druggist recommends as an anti-freezing solution a 20-per cent solution of muriate of ammonia. Will it injure rubber packing or the motor, and is it safe to use?—E. F. LARSON.

Muriate of ammonia, or sal-ammoniac, placed in the water circulating system will prevent freezing, but at the same time will have a chemical action on the metals that would soon cause trouble. In addition to this there would be an electrical action between the copper and the solder, which would cause leaks. A good solution is made by adding pure calcium chloride to warm water, using 4½ pounds of the chloride to a gallon of water. This solution will be fluid at zero, Fahrenheit.

USE OF IGNITION BATTERIES

Decatur, Mich.—Editor MOTOR AGE—What would be the effect of wiring-in partially exhausted ignition battery cells with fresh ones? What amperage should cells have and what is the best type of ammeter for ordinary use?—A. E. LAWRENCE.

The effect of wiring new dry cells in series with old ones is to raise the current voltage and give greater efficiency from the used cells. They should not be used after the amperage has dropped below 4 amperes. The ampere reading of a cell varies with its size, so it is impossible to say what the proper reading should be. The best type of ammeter is the "dead beat" variety that is manufactured by many concerns using the advertising columns of MOTOR AGE.

WIRING TWO-CYLINDER MOTOR

Minneapolis, Minn.—Editor MOTOR AGE—Will you kindly show through the Readers' Clearing House the correct way to wire a double opposed gasoline engine, using a double dash type spark coil and having enclosed switch? What is the proper wire to use?—READER.

Unless a sketch showing the number of terminals on the coil is furnished, MOTOR AGE cannot answer the question, as the proper way to wire will depend altogether upon the construction of the coil.

HORSEPOWER RATINGS

Canton, Ill.—Editor MOTOR AGE—I have a runabout with a single-cylinder, four-cycle motor of 4½-inch bore by 6-inch stroke. The car weighs about 1100 pounds, and I do not seem to get as much power as I would like to have, although I believe I am getting all there is in my engine. I intend to put in a horizontal double opposed engine, of 4-inch bore and stroke, also a four-cycle. How much more power should I get out of the two-cylinder engine, and at what horsepower would you rate it? The inlet valves are automatic, and are 1¼ inches in diameter, and it is fitted with a 20-inch fly wheel which weighs 110 ponnds. At what horsepower would you rate the single cylinder motor?—F. W. MATTIESEN.

The single-cylinder 4½ by 6-inch motor would be rated at about 6 horsepower, and the double cylinder by 4 by 4-inch motor, at 8 horsepower at the same number of revolutions per minute. As the 4 by 4-inch motor is capable of 30 per cent over the 4½ by 6-inch motor, it should be possible to get a maximum of nearly 10½ horsepower.

VALVE DIMENSIONS

Janesville, Wis.—Editor MOTOR AGE—Kindly advise me through the Readers' Clearing House what the proper valve dimensions and lift would be for a 4½ by 4½-inch engine running at 800 revolutions per minute, with automatic inlet valve.—E. TRACY BROWN.

Make the inlet valve 1 5-16 inches in diameter and the exhaust valve 1½ inches in diameter. The motor speed will regulate the lift of the inlet valve and that of the exhaust valve should be ⅜-inch.

COST OF OPERATION

San Francisco, Cal.—Editor MOTOR AGE—In your issue of December 1 I noticed with interest an item dated Geneva, Switzerland, giving a statement of the expense of operating a car for a season. I have kept an accurate account of the cost of running my small car for the past season, and you are welcome to use the facts if you find them of sufficient interest.

The car was an Olds tonneau, accommodating four people, and having a single-cylinder, 10-horsepower, four-cycle engine. Between June 13 and November 25, 1904, the car was run in and around Chicago just 2,980 miles by odometer, averaging two persons in the car for the entire distance. The gasoline consumption was 207 gallons, giving an average of 14.5 miles per gallon. The following is summarized statement of expense:

Cost of car delivered in Chicago	$ 960.00
Frame shed 10 by 12 feet	60.00
Permanent equipment for car	100.37
Tire expense	62.60
Repairs	39.70
Supplies	53.99
Storage on trips	10.00
License and number	4.00
Gasoline	33.75
Lubricants	5.85
Total	$1,330.26

The tire expense consisted of two 3½ by 30-inch inner tubes, one 3½ by 30-inch detachable casing, and revulcanizing new treads on two casings. At the end of the season, besides good tires on the machine, there remains as an asset, one new inner tube and one casing with new tread. The total tire trouble for the season was one puncture, caused by running over a tack in the barn, and one exploded inner tube, caused by improper replacing.

The owner cared for the car himself, and made minor repairs and adjustments. Ignoring depreciation on barn, car and equipment, the operating expense amounted to $210 for the season, or 7 cents per mile.—L. B. DIXON.

GET A GOOD CHAUFFEUR

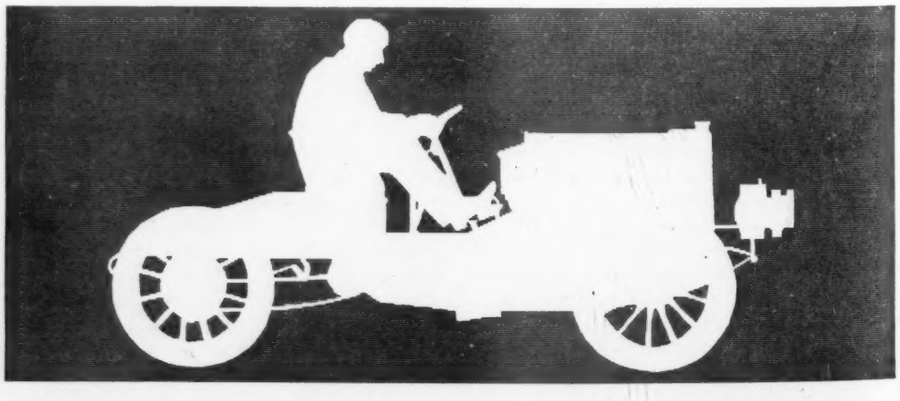
Memphis, Tenn.—Editor MOTOR AGE—I have read the article regarding car owners having trouble on account of their chauffeurs taking cars out for midnight runs, etc. I would suggest that as a general rule that more care be taken in the selection of the men instead of taking whoever is offered by the agency the car is bought from, as this class always, to a greater or less measure, has strings out to pull.

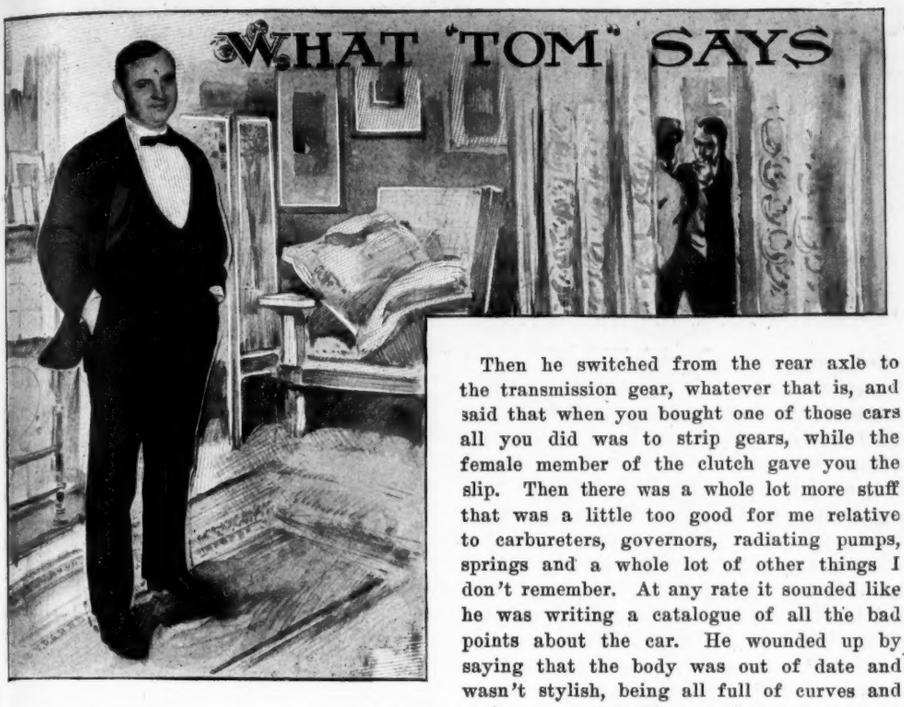
Also there is altogether too much hiring of men at $30 or $40 a month, and paying $80 to $120 repair bills, to say nothing of the time the car is out of commission in the shop. This was my early experience, so I hunted up a man who showed that he knew how to drive, but better still, how to keep my car out of the shop altogether. He does this, not by being able to repair a break quickly himself, but by taking as much interest in the car as if it were his property, allowing no abuse and keeping things "keyed up" ahead of times, so that I can have the pleasure of a ride without a stop on the road.—RICHARD L. STINSON.

ANTI-LAMP-FREEZING

Chicago, Ill.—Editor MOTOR AGE—What solution may be used to prevent freezing of the water in acetylene gas lamps?—A. B. C.

To prevent the water in the generator reservoirs of acetylene gas lamps from freezing, a solution of chemically pure salt—sodium chloride—may be used. Common salt contains magnesium chloride, which acts upon metals and should not be used.





BEFORE I was steward of this here automobile club I had an idea that a man could go out and buy an automobile about the same way he would go and buy a suit of clothes or a bookcase. Since I've had the job, however, I've found out a few things, most of which show that a man that has a couple of thousand dollars and wants to buy an automobile stands about as much show of knowing what he is going to draw as he does when he plays the races. I haven't bought any automobiles yet, but I have played the races, and it's me to the ponies every time with my money, unless I get a good deal more money, and a good deal wiser about automobiles.

You see, this is the way of it. I haven't got anything against the automobiles; just now they're my bread and butter, and I would like to own one real well, the same as anybody else; and what's more, I guess some of them must be all right, judging from the way some of these here club members break records, especially down here by the fire. But what gets me is that if you ask one of the fellows that sell automobiles about it, it don't take you very long to find out that there ain't a decent machine on the market. They've all got something wrong with them. Some of them are daffy in the motor, some of them have spavined carbureters and some of them are put together like a suit of hand-me-downs. At least that's what these agents say. Knocking? Oh no! Just explaining; telling the customer a few things on the quiet to keep him from spending his money foolish.

Why, the other day one of the members, who is a dealer, brought a fellow in here to lunch and began talking to him about another dealer's automobile; though I couldn't see why he wanted to talk so much about the other fellow's car when he had one to sell himself. He went on and explained how the rear axle was made of about eleven pieces, and so it couldn't possibly stand up. When the buyer fellow said they had stood up last summer, the agent said that didn't make any difference, they were all going to break down next summer.

Then he switched from the rear axle to the transmission gear, whatever that is, and said that when you bought one of those cars all you did was to strip gears, while the female member of the clutch gave you the slip. Then there was a whole lot more stuff that was a little too good for me relative to carbureters, governors, radiating pumps, springs and a whole lot of other things I don't remember. At any rate it sounded like he was writing a catalogue of all the bad points about the car. He wounded up by saying that the body was out of date and wasn't stylish, being all full of curves and curly cues and looking as though it was cut out by a dressmaker.

At dinner time that evening in drops the same fellow that was looking to buy an automobile, only this time he came with the dealer that's selling the car whose body was designed by a dressmaker. As soon as they'd ordered what they wanted to eat, the dealer began telling the other fellow about his machine and the very first thing he had to say was:

"Just look at that car; look at its body; see those beautiful curves. That's a car that's designed by people who know their business. There is none of those awkward straight lines and flat places on it that make you think it was designed by a Jew who was trying to save the lumber."

As for the carbureter and the motor and all the other things, there was nothing to it. They were the real thing, but the dealer kind of hurried through this part of his talk because he wanted to show the other fellow as to why the car he had seen in the morning was really the biggest bunco game that there was in the city. How he did make that other machine look like a ragpicker's wagon! Finally the fellow with the money said he guessed he wouldn't make up his mind until he had seen some more cars, and that the next morning he thought he would go in and take a look at the Dazzler. Then he got it, and from what I heard, this new one he mentioned was the worst of the lot.

I am expecting the same fellow in here this noon with another agent who just called up to order some lunch for two and if this thing keeps up the way it's been going, the fellow with the coin is liable to blow the game and put his money in copper stock.

What makes a hit with me is that none of these agents would knock for a thousand dollars. They just feel such an interest in the fellow with the money that they hate to see him go wrong. In the meantime, though, this fellow is wondering how the devil he can find out if there is a good machine at all on the market, and if so, which one it is. They all seem to run pretty good, but when you listen to how they're made, as told by a fellow who don't want you to buy one, you find out that the whole automobile trade is making Barrios diamonds.

One of the members was up to Milwaukee the other day, and he came back with a tale that sounded pretty good. Some of it got by me, but the way it listened made me think it was the real goods. At any rate it seemed to offset considerably what the daily papers say about automobilists being chumps. As near as I can remember it, this is what he said:

"There are all kinds of men, and probably one of the worst subdivisions of the homo genus is the man with the *if*. Spell it with italic letters, for that is sure the position it occupies in his vocabulary. It's the man with the *if* who is always seeing things. And here is what he said Sunday night in Milwaukee:

"'If the driver of a certain automobile which ran onto one lift of the Grand avenue bascule bridge while the other lift was in the air had gone 6 inches farther he would have dumped himself, his machine and his companions into the icy water of the river and drowned to death all the riders.'

"And then he delivered his verdict: 'It was plain carelessness on the part of the chauffeur.'

"Now what would seem to any ordinary human being with an intellect as large as the head of a tack the plain common sense size-up of what really occurred and what 'might have' occurred was this: A machine, the owner and occupants of which are unknown, ran onto the lift of the Grand avenue bridge. That was at about 6 o'clock Sunday evening. The other lift had just been raised to permit the passage of a tug. The driver had his head turned and was conversing with the other people in the automobile. Perhaps that was carelessness and very probably it was.

"Fortunately the vehicle was an automobile. For when the driver turned his head and noticed the yawning gap in front of the machine—only a few feet away—he was able to stop the car within a fraction of a moment and he was safe by 6 inches, which, according to a certain variety of logic, is as good as a mile. If the vehicle had been a buggy, drawn by a horse, it is entirely a long chance what might have happened. There was a driving snow and the natural instincts of Mr. Horse probably would not have worked to any great advantage. Certain it is, however, that if a horse and buggy had been driven as close to the brink of a precipice as was the automobile Sunday night, the sequel of the story would have been in the morgue, unless, through almost impossible good luck, it had merely gone into the police records.

"The driver might have been careless, but he had a good head on him for his quickness in reversing the machine testified to his possessing such qualities. The copper stationed at the bridge thought he read the number on the car but the number which he reported is that of a machine belonging to Gustav Frellson, which has been out of commission for several months.

"And that circumstance, by the way, may be taken as an indication of the value of the tag system. Here is the first instance of which there is any record in which the number might be of some interest."

FROM THE FOUR WINDS

Still Another — Harley Davidson, who is one of the best professional skaters in the world, and who was also during several years champion bicycle rider of Canada, will try his luck at automobile track racing next season.

Swiss Show—At a recent meeting of the board of trade of Swiss automobile and cycle manufacturers it was decided to organize an automobile and cycle show in Geneva, and it is likely the government will vote a credit toward the expenses.

Private Opening—The management of the importers' automobile salon, which is to be held at the Herald Square hall January 11 to 24, has decided that there will be a formal opening of the exposition on the evening of January 10, and that the admission that night will be by special invitation only.

THE INTER-CLUB CHALLENGE TROPHY, A PERPETUAL CUP TO BE COMPETED FOR BY ALL THE CALIFORNIA AUTOMOBILE CLUBS

Winter Coast Driving—The first long distance run made this winter on the Pacific coast was completed a few days ago by Charles D. Blaney, of San Jose, Cal., who drove a White steamer from San Francisco to Los Angeles. The first day Blaney covered over 100 miles, but during the remainder of the run of 500 miles there was no attempt at record breaking.

Chile Buys American Cars—Reports from Iquique, Chile, say that city ought to be a good field for the sale of automobiles. The expense of keeping horses and mules is so high that automobiles ought to easily replace them. The first American automobile brought into Chile, it is said, was imported in November, 1903, the importer being one of the American consular officers stationed in Iquique. Since then a number of others have been imported and no doubt their number will be increased in the near future.

Think of It—The Congo authorities are about to construct a highway for automobile traffic between the Congo river and the Nile in Africa. The projected road will facilitate and expedite trading intercourse between several important points. The length of the road will be about 800 miles and will be constructed by Belgian engineers. Three automobiles are now running over a portion of the route. The completion of this road will tend to increase automobile sales in that portiton of the world.

First Real War Car—Experiments have been made recently in St. Petersburg, Russia, with a new automobile train for military purpose. It consists of a four-cylinder 36-horsepower Panhard & Levassor car upon which a large dynamo has been placed, which furnishes the power to the electric motors of five trailers. Each of these carried a load of 1,760 pounds, and although the temperature was 9 degrees below zero and the roads upon which the tests were made were hilly, the train was driven at a rate of speed averaging 10 miles per hour. The train will be sent to Manchuria to carry war material and provisions.

Kulick vs. Oldfield—According to reports from San Francisco Barney Oldfield will go for records up to 25 miles at a meeting planned for Christmas afternoon on the Ingleside track. Frank Kulick, who is also in California, is to meet Barney in a special match the same day.

Lower Duty Proposed—A reduction of the duty on gasoline from $1.25 to 65 cents per 100 kilos is proposed in the revision of the Philippine tariff act, for the reason that the present duty is high, and it is believed a reduction would result in a material increase in the importation of gasoline for use as fuel in motor cars and motor boats.

Gave Pastor a Car—A number of members of the Presbyterian church, on Fort street, Detroit, Mich., have made a present of an automobile to their pastor, Rev. Edward H. Pence. It is said that the congregation is widely scattered and that the automobile will thus be of great benefit to the pastor in carrying on his work of spreading the gospel.

Monthly Auction Sales—The public auction of automobiles held in New York recently seems to have been successful, inasmuch as W. D. Grand has decided to arrange monthly sales. The next one will be held December 30. A 70-horsepower Panhard racer is to be among the machines to come under the hammer, besides 100 others. All cars will be placed on exhibition the day before the sale.

Track for Texas—It is reported in Dallas, Tex., that E. H. R. Green, has interested a number of his friends and some eastern sportsmen in a project to purchase a large piece of land in Dallas upon which a 2-mile automobile track is to be made. A 100-mile race is being arranged by the Dallas Automobile Club, of Dallas, Tex., to be held on the fair grounds track New Year's day. The event will be open to automobiles of all makes in Texas. Mr. Green has offered a cash prize of $250, which will be awarded to the machine which finishes first.

Figuring Expenses—A French owner of a one-cylinder 6-horsepower voiturette has kept track of the expenses and the distance traveled with the car for 11 months, during which time he used the machine 203 days. The expenses amount to $476 for 6,813 miles covered. In the expense account gasoline, oil and lubricant cost $145.70; repairs to the cardan, $22.80; repairs to the speed change gear, $20.20; to the radiator, $18.60; repairs to the wheels and the couplings, $18.60; a new tire, $17; two inner tubes, $9.60; new spark plugs, $10.80; valves and springs, $7; starting crank, $6; mudguard, $4; carbureter float, $2.40; insurance, $35.60; taxes, $6. The total average expense for each of the 203 days was $2.16, while the average daily expense since the car became the property of the automobilist was $1.40.

Morgan Saw Palma—According to a cable from Havana, W. J. Morgan has secured permission from President Palma to have a 200-mile automobile race on the San Cristobal road on February 4, to be followed by motor boat races on February 8, 9, 10 and 11. S. A. Miles, manager of the National Association of Automobile Manufacturers, went to Cuba last week with Senator Morgan, and the pair will stop at Dayton on their way to New York.

Looking for Trouble—Fred E. Perkins, who owns the track at Providence, R. I., where the Rhode Island Automobile Club holds its race meets, upon returning from Europe last week said the Hotchkiss people have declared their intention of sending two 100-horsepower cars to this country for exhibition at the Madison Square garden show, and later for competition in the Florida tournament. Henry Fournier is coming over to do the driving.

Case of Evolution—Automobilists as well as cyclists will compete in the historic midnight run from New York to Tarrytown, which begins 1 minute after midnight on the morning of January 1, 1905. The cyclists will start at 1 minute past 12, the motor cyclists ½ hour later and the automobilists at 1 o'clock. The distance by road is just a little more than 25 miles and although originally the first arrival received only a magnum of wine, the Associated Cycle Clubs of New York now offers valuable prizes.

English Capital—Much English capital is invested in French automobile concerns. It is said that almost every dollar invested in the Darracq company, which is one of the biggest concerns of the kind in the world, is owned by Englishmen. The capital of the concerns making the Rochet-Schneider and the Hautier cars is also owned in a large percentage by Britishers. It is also rumored that Renault Brothers will reorganize and that an English company will be formed to take entire charge of the sales department, while the Renaults will look after the manufacturing end.

Magistrate Talked—At the Automobile Club of America last week the members had the pleasure of listening to Magistrate Crane, famous in New York city for his severity in dealing with those who come before him in his official capacity. His honor was just as emphatic in his speech to the members as he has shown himself in court. He declared automobilists were not as careful of pedestrians' rights as they might be; that they must pay more attention to the law, and that they should make efforts to have the present laws amended or revised so as to be more specific in their provisions.

Territories Good Customers—Figures have been compiled showing the shipments of automobiles from the United States to its noncontiguous territories during the 10 months ending October, 1903 and 1904. With the exception of the Philippines large increases are noted. During the 10-months' period of 1903 Hawaii received $3,428 worth of automobiles from this country, the amount increasing to $15,343 this year. During these periods Porto Rico showed an increase from $561 in 1903 to $25,171, while the shipments to the Philippines declined from $3,932 in 1903 to $3,520 this year.

Small Balm—A man who had sued for $10,000 damages as the result of an automobile accident was only awarded $275 by the court.

Wants to Loop the Loop—Harry Curran, of Syracuse, N. Y., is at work on a project to loop the loop with an automobile. Curran was the inventor of looping the loop with a bicycle and is anxious to try the dangerous stunt with an automobile.

Rather Inconsistent—The fact that President van Zuylen, of the Automobile club of France, has purchased a 60-horsepower Mercedes car has caused much comment in Germany as well as in France. In the latter country people have said that the president's action was very unpatriotic.

Not His Fault—A motorist from Toronto, Canada, was recently discharged by Judge Morgan, of that city, from the charge of having been reckless in running over a woman. The driver, A. G. Hartrick, ran the car at a slow rate of speed and tried to avoid coming in contact with the woman, who became excited.

Figures Changing—At this year's Stanley show, held in England last month, there were 247 motor bicycles exhibited, while there were 361 at the show held in 1903. There were fifteen motor tricycles, compared with fourteen at the previous show. There were no motor quads, but fifty-one automobiles, which is an increase of eighteen, as compared with the 1903 exhibition. The total number of all exhibitors was 326, the largest number since 1897.

Pay for Street Use—In the village of Teltow, Germany, a fee is to be collected from automobilists using certain roads of the village. The rates have been fixed as follows: Motor cars used for passenger service, fitted with rubber tires and having fewer than four seats, 5 cents, and 2½ cents if the car seats more than four persons; cars not having rubber tires, carrying fewer than four passengers, 3¾ cents, and vehicles carrying more than four passengers 7½ cents; commercial cars with rubber tires, 2½ cents when empty, 5 cents with a load; cars not having rubber tires, 3¾ cents empty and 7½ cents loaded.

Good for the Dominie—The Rev. Floyd Tompkins, of Philadelphia, Pa., in a recent sermon on "Tolerance," referred to the automobile and the intolerance exhibited by some law-makers in their efforts to harass owners of self-propelled vehicles. Such treatment, he said, was a bar to progress, and he suggested that in the interest of science, if on no broader ground, a little more broad-mindedness be shown by the legislators. Incidentally he showed where narrow-mindedness and failure were often, if not always, synonymous, and that modern progress and broad-mindedness went hand-in-hand. "The automobile," he continued, "is a new departure and as such should receive fair and impartial treatment. Harshness will not prevent its growth or use, neither will the attacks of our public men, for they are, as a rule, converted to its use, after seeing its tremendous advantages over the horse. We must remember that there are honest automobilists, as well as honest horsemen, that a horseman is not made in a day, and neither is the automobilist. Study and experience are needed by both classes, and in a few years the automobile will be better handled than the horse can be, for nothing but the breaking of a necessary part of its machinery can put the occupants in any danger, while a horse is never absolutely safe."

Liverpool's Motorists—According to recent official statistics, 722 licenses for drivers of motor cars and motor cycles were issued in Liverpool, England, this year. The number of automobiles registered is 306 and the number of motor cycles 321.

Show for Denver—According to advice from Denver, Colo., plans are being made to hold an automobile show in the Coliseum hall next March. A 2-days' race meet is also being planned for Memorial day by the Denver-Overland Racing Association.

Varied Duties—The Motor Volunteer Corps of England has a membership of 155 motorists. During this year the members were used on 1,289 different duties and Captain H. F. Trippel established the record for the corps by covering a distance of 4,031 miles on exclusive military duties since the first of May.

Rigid Customs Rules—French automobilists who cross the frontier of Alsace and Lorraine complain of the unsatisfactory customs arrangements. The collectors' hours are from 8 o'clock until noon and from 2 until 7 in the evening. If an automobilist arrives at any other hour he cannot cross the border. The bonds are claimed to be excessive, the law requiring a deposit of $10 for every 220 pounds of weight of the car, which in most instances means a deposit of at least $100, which amount many automobilists often are unable to spare.

Cheap Traveling—An English automobilist, owner of a 10-horsepower Argyll car, has kept a record of expenses from September, 1903, until the last day of August, 1904. During those 12 months he covered 6,165 miles, using 266 gallons of fuel, an average of 23½ miles per gallon. The cost of repairs was $89.46, or $7.45 per month. The fuel and lubricant expenses are figured as follows: Gasoline, $72.48; cylinder oil, $2.40; gear box oil, $1.80; recharging accumulators, $3, or $79.68 for one year or $6.64 per month. The expenses during the year amounted all told to $215.80, or $17.98 per month, an average cost of 3½ cents a mile.

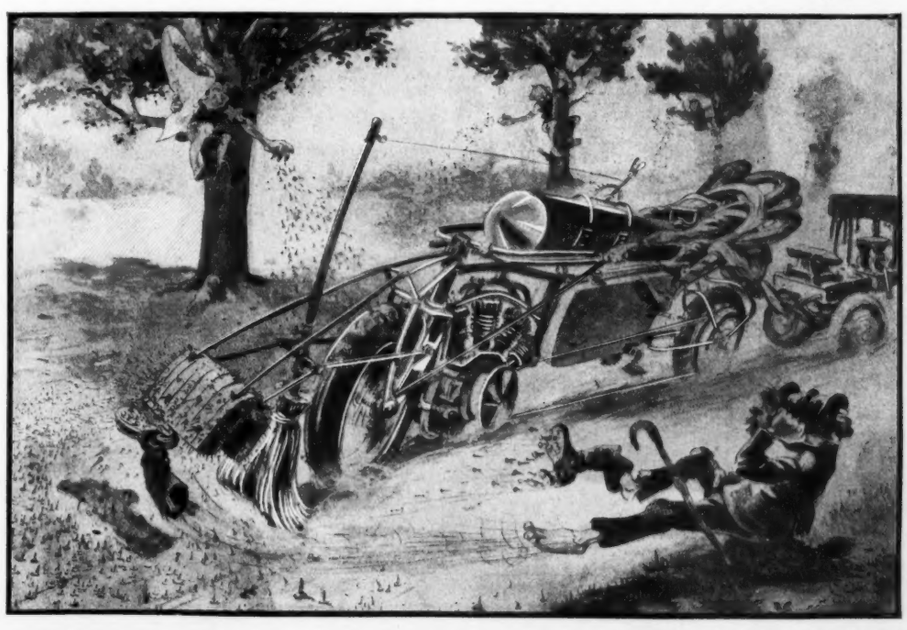
Not Chauffeur?—The position of automobile engineman of the fire department was recently created by the fire department of New York. The salary of the man will be $1,200 per year.

Twenty-five Per Cent—Of the 400 pupils of the professional school of trades in Brussels, Belgium, ninety-five are following the automobile courses and are preparing themselves to become chauffeurs.

Broke Motor Cycle Records—Riding an Alcyon motor cycle equipped with a 3½ horsepower Buchet motor, Anzani, the French motor cyclist broke all the existing records for all classes of motor cycles on the Princes' track of Paris, December 3, by covering the classic distance of 100 kilometers in 1:08:01⅕, breaking the former record by nearly 10 minutes. Fifty kilometers were covered in 33:45⅘, while during the hour 54½ miles were covered.

Propose Another—The Scottish Automobile Club, which has aranged reliability trials during the last 3 years, has announced that it will arrange another trial next season, providing the project meets with sufficient support from the manufacturers. According to the present plans the trials are to last at least 3 days, embracing a tour through Scotland, passing through most of the important cities and through the mountainous roads and passes in Scottish highlands. There will also be three hill-climbing tests of a more severe nature than ever before held.

Up-to-Date People—A country road map showing the roads which are to be ultimately improved under the provisions of the Higbie-Armstrong law has been adopted by the supervisors of Onondaga county, New York. The state pays 50 per cent, the county 35 per cent and the towns 15 per cent of the cost. The map includes practically all of the main highways in the county and about 175 miles of roads will be macadamized. The map insures the continuity of the roads designated, so that when the system is completed there shall be no broken stretches.



DAS SCHNAUFERL'S CONCEPTION OF A GERMAN MACHINE SUITABLE FOR THE INTERNATIONAL MOTOR CYCLE RACE TO BE RUN IN FRANCE NEXT SUMMER

AMERICAN MOTOR LEAGUE

OFFICIAL BULLETIN

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THIS LEAGUE

Is Now Collecting Route Information

covering all automobile routes in the important states and will publish road books for motor car users as fast as complete information is received. The A. M. L. is the only organization engaged in this work, and it invites the co-operation of all persons interested. For full information and membership blanks address American Motor League, Vanderbilt Building, New York City.

REDUCED FARES TO CONVENTIONS

The national convention of the A. M. L. will take place at New York on January 16 to 21 inclusive—week of the automobile show—and an adjourned meeting of said convention will be held at Chicago on February 6 to February 11, inclusive—week of the Chicago show. The league has secured for its members a special reduced rate of fare on the principal railroads running to New York and Chicago. To enjoy the benefit of this reduction it is necessary for members to follow carefully the important conditions:

1—No reduced rate will be given to any person not holding the proper certificate, and only members of the American Motor League will receive the benefit of this reduced rate. Persons joining the league while the automobile shows are in progress will not receive this benefit and the league is required to deliver to the railroad companies a full list of its members before the opening of the show week. Persons not on this list will not be recognized by the railroad companies as entitled to the reduced rate. It is therefore important that members of the A. M. L. should renew their memberships—if already expired or about to be expired—and that persons intending to join should communicate with the secretary at once.

2—Purchase a ticket to New York, or Chicago, at the regular tariff rate, and at the same time obtain from the ticket agent a certificate properly signed and stamped. If you cannot procure a through ticket from your starting point get a ticket to the most convenient point at which a through ticket can be had, and there repurchase through to your destination—New York or Chicago—procuring a proper certificate from each agent from whom a ticket is bought, and present all certificates to the special agent at the meeting.

3—Under this arrangement tickets for New York must be purchased not earlier than Thursday, January 12, and not later than Friday, January 20. Tickets for Chicago must be purchased not earlier than Thursday, February 2, and not later than Friday, February 10.

4—On reaching the city of New York—or Chicago—present your certificate to the officer of the A. M. L. and to the special agent of the railway association, stating your league number or presenting your league membership ticket at the same time. Your certificate will then be countersigned by these officials and returned to you. You will then be entitled to purchase tickets for your return journey for one-third the first class limited fare.

5—Reduced fares are granted only in case the "going"—one way—fare is at least 75 cents.

6—To prevent delay all certificates should be presented to the ticket agents for return tickets at least 40 minutes before the departure of the trains on which return trips are to be made. If this is not done a rush of work at the ticket offices may prevent the issue of reduced rate tickets to a later hour.

7—Certificates and tickets issued under this arrangement are not transferable under any circumstances and if transferred will get the league into trouble.

NOW LISTEN

The league is trying to make this subject plain to its members. It expects its members to read, to understand, and to explain to others. The league assumes a certain responsibility every time it countersigns one of these railroad certificates. Last year several of our members abused the cut rate privilege secured for them by the league and the league was compelled to pay the railroad companies about $200 "to make good." The names of these members have been dropped from the roll and they have since been doing business with the lawyers. The league is trying to serve its members. It needs members—thousands of them. It has taken up a great work and will carry it along to a successful end. Its officers receive no salaries and they are entitled to the help of every automobilist who believes in the common cause. Nearly every man in the country has too many pockets in his clothes. Why should he not carry in one of these pockets a few A. M. L. membership blanks? The league will send him a printed leaflet setting forth the work and objects of the organization, and, really, they are worth talking about.

TO ALL CONSULS

Now is your opportunity. Thousands of your friends will go to New York in January and to Chicago in February. They should all be A. M. L. members. They may not join for sentimental reasons; many of them must be shown a substantial, practical reason. With them the question is: "What do I get for my $2? They expect a great organization to be built up by others and to come to them with thousands of expensive maps and road books, and well equipped departments of information—with a whole list of ready-made benefits. Men of this class do not make the best members, but good company will improve them and the fees they pay help to carry on the league in its pioneer days. To these and to all others you should bring home this reduced rate benefit and induce them to come to these league conventions during the 2 weeks at New York and Chicago when so many automobilists will be brought together. As consuls you have not all served the league to the best of your splendid ability. You have all received membership blanks. The secretary will send you more, if you give him half a chance, and will write you an affectionate letter into the bargain.

ARE YOU A MEMBER?

The league is in earnest. Its officers are working with a determination to land it on the solid ground of success. The first 5,000 are pioneer members of the organization and will always hold membership tickets in the pioneer class. This class is filling rapidly and will soon be closed. There is no initiation fee. Dues, $2 per year in advance. Send your name and address to the secretary with 1 year's dues. Address, Vanderbilt building, New York city.

Among the applications received at headquarters last week were those of Hon. Robert B. Roosevelt, John E. Roosevelt and Robert B. Roosevelt, Jr., of New York, and Hon. Hiram W. Sibley, of Rochester. The first three are the uncle and two cousins of the president and the last named is the banker-philanthropist.

All members whose yearly dues remain unpaid should remit annual dues—$2—to the secretary and receive a new ticket. The date of expiration is plainly marked on each membership card. All membership privileges cease when the membership terminates. Do not wait for a personal letter from the secretary.